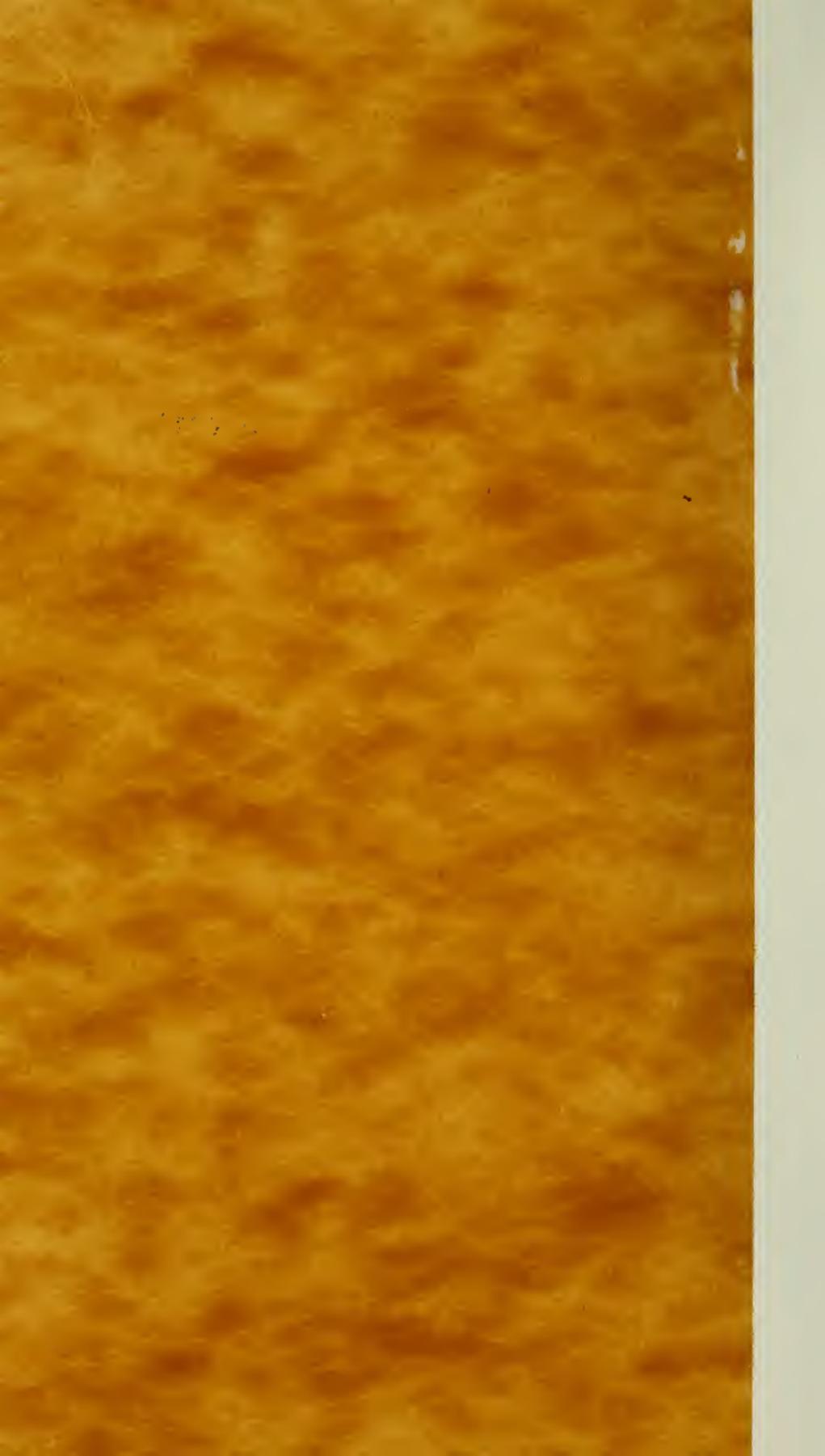


C
P97H
874/75-
877/78





Digitized by the Internet Archive
in 2013

C
57 H
874-75

THE LIBRARY.
OF THE
UNIVERSITY OF ILLINOIS

THE PURDUE

University Register

1874 AND 1875.



THE
PURDUE
University Register.

1874-75.



LAFAYETTE, INDIANA.

MDCCCLXXV.



C
P97H
1874/75-1877/78

OFFICERS OF THE UNIVERSITY.

BOARD OF TRUSTEES.

GOVERNOR THOMAS A. HENDRICKS.
JOHN PURDUE, Lafayette.
MARTIN L. PEIRCE, Lafayette.
JOHN A. STEIN, Lafayette.
JOHN R. COFFROTH, Lafayette.
JOHN SUTHERLAND, Laporte.
AUSTIN B. CLAYPOOL, Connersville.
*BENJAMIN C. SHAW, Indianapolis.

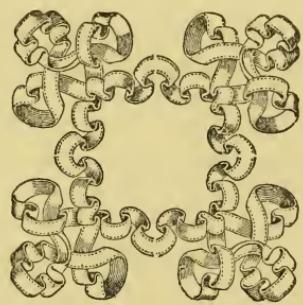
OFFICERS OF THE BOARD.

GOVERNOR HENDRICKS, *ex officio* President.
JOHN A. STEIN, Secretary.
MARTIN L. PEIRCE, Treasurer.

EXECUTIVE COMMITTEE.

JOHN PURDUE.
JOHN A. STEIN.
A. C. SHORTRIDGE.

*Resigned October 20, 1874.



FACULTY OF THE UNIVERSITY.

PRESIDENT,
ABRAHAM C. SHORTRIDGE,
Moral Science and Psychology.

PROFESSORS.*

JOHN S. HOUGHAM,
Professor of Physics.

JOHN HUSSEY,
Professor of Botany and Horticulture.

WILLIAM B. MORGAN,
Professor of Mathematics and Engineering.

HARVEY W. WILEY,
Professor of Chemistry.

ELI F. BROWN,
Professor of English Literature and Drawing,

MRS. SARAH A. OREN,
Assistant Professor of Mathematics.

Professor of French and German Languages. †

L. A. BURKE,
Superintendent of Farm.

H. C. HENDRICKSON,
Steward.

*The Professors' names are arranged in the order of seniority of appointment.
†To be supplied.



NAMES OF STUDENTS.

FOURTH YEAR, OR SENIOR CLASS.

Harper, John Bradford.....Indianapolis.

THIRD YEAR, OR JUNIOR CLASS.

None.

SECOND YEAR, OR SOPHOMORE CLASS.

Bohrer, Charles John.....Lafayette.
Clark, Franklin Pierce.....Kokomo.
Eldridge, William King....Lafayette.

FIRST YEAR, OR FRESHMAN CLASS.

Blair, Jesse Harvey.....Indianapolis.
Gish, George NyeLafayette.
Goodwin, Fremont.....West Lebanon.

Hatch, Aretas Wallace.....	Indianapolis.
Jamison, George Andrew.....	Chauncey.
Morgan, Earl.....	Richmond.
Noble, Daniel William.....	Indianapolis.
Park, Thomas Miller.....	Lafayette.
Vanatta, John Crothers.....	Lafayette.

PREPARATORY CLASS.

Allen, John Daniel.....	Lafayette.
Bringham, Thomas.....	Lafayette.
Curtis, Arthur Henry.....	Lafayette.
Chute, Daniel McBride.....	Lafayette.
Davis, Edward Otis	Lafayette.
Downing, Charles Sumner	Octagon.
Jamison, Oliver Perry Morton.....	Chauncey.
Lee, Victor Henry..	Chauncey.
Moody, Frank Burdett.....	New Albany.
Nisley, Oliver Morton	Lafayette.
Myers, Westley	Lafayette.
O'Gara, Edward.....	Lafayette.
Peirce, Charles Howard....	Lafayette.
Ray, Benjamin Franklin.....	Lafayette.
Rogers, Thomas Hill	Lafayette.
Ross, William..	Lafayette.
Reed, Worth	Covington.
Swan, Lloyd Humboldt.....	Fowler.
Severson, Wilbur Fisk.....	Lafayette.
Sheetz, James Robert.....	Montmorency.
Seawright, Edward Meeker..	Lafayette.
Wallace, Adam	Lafayette.
White, John Wesley.....	Lafayette.

Allen, Oliver	Lafayette.
Carnahan, Edward James.. ..	Lafayette.
Gregory, William Richardson.. ..	Lafayette.
Harter, Charles William....	Romney.

Judy, Augustus Manley.....	West Lebanon.
King, George.....	Montmorency.
Kenny, Charles Fremont..	Lafayette.
Levering, Frederick Rosier..	Lafayette.
Morgan, Jesse Henley.....	Richmond.
McClure, James Lawrence.....	Lafayette.
Martin, George Edward.....	Lafayette.
McMikin, James Thomas.....	Sugar Grove.
Morton, William Samuel Throck.....	Centreville.
McCoy, Thomas.....	Rensselaer.
Osborn, Chase Salmon.....	Lafayette.
Rainey, Charles Samuel.....	Lafayette.
Rank, William Henry.....	Lafayette.
Styner, Overton Jacob.....	Montmorency.
Shortridge, Willard Perley.....	Lafayette.
Tullidge, Charles.....	Richmond.
Terry, William	Chauncey,
Williams, Edward.....	Fowler.
Weaver, John	Lafayette.
Westfall, George Ellis	Montmorency.
Westfall, James Thomas	Montmorency.
Wetherill, Richard	Lafayette.

SPECIAL STUDENTS.

Bullard, William Mason, (Chemistry,)...Indianapolis.
Wallace, James Philip, (Metallurgy,)....Lafayette.



COURSES OF STUDY.

I. AGRICULTURE AND HORTICULTURE.

- (a.) Full Course.
- (b.) Special Course.

II. ENGINEERING.

- (a.) Civil Engineering.
- (b.) Mechanical Engineering.
- (c.) Mining Engineering.
- (d.) Architecture.

III. INDUSTRIAL DESIGN.

IV. NATURAL HISTORY.

V. CHEMISTRY.

- (a.) Chemical Technology.
- (b.) Metallurgy.
- (c.) Didactic Chemistry.

COURSE IN AGRICULTURE AND HORTICULTURE.

FIRST YEAR.

1. Solid Geometry, 5; Business Forms and Drawing, (Lettering and Working to a Scale,) 5; French, 5; General Chemistry, 5.
2. Plane and Spherical Trigonometry, 5; French, 5; Geology, 5; Chemistry, 5.
3. French, 5; Botany, 5; Chemistry, 5; Surveying, 5.

SECOND YEAR.

1. French and German, 5; Logic, 3; Chemistry, (Qualitative Analysis,) 5; Botany, 5; Entomology, 2.
2. French and German, 5; History, 3; Chemistry, (Analysis of Soils,) 5; Land Drainage and Irrigation, 2; Economic Botany, 3; Mechanical Cultivation of Soils, 2.
3. French and German, 5; English Literature, 3; Chemistry, (Natural and Artificial Fertilizers,) 5; Zoology, 5; Elements of Agriculture, 2.

THIRD YEAR.

1. Descriptive Astronomy, 5; German, 5; Horticulture, (Propagation, Budding, Grafting of Fruit Trees,) Management of Nursery or Orchard, 5; Landscape Gardening, 2; Origin of Soils, 2; Fences and Hedges, 1.
2. German, 5; Political Economy, 3; Zoology, 5; Domestic Gardening, (Grapes and Small Fruits,) 3; Management of Poultry, 2; Management of Bees, 2.
3. German, 5; Psychology, 3; Physic, (Machinery,) 5; Zoology, 5; Principles of Farm Management, 2.

FOURTH YEAR.

1. Moral Science, 2; German, 3; Management of Artificial Forests, 2; Zoology, 5; Stock Breeding and Raising, 3; Geology, 5.
2. French and German, 5; History of Cultivated Plants, 3; Horticulture, 2; Comparative Anatomy of Domestic Animals and Veterinary Surgery, 5; Sheep Husbandry, 3; Use of the Microscope, 2.
3. French and German 5; Embryology, Experiments in Fertilization, 2; Preservation and Marketing Farm Products, 3; Rural Law, 1; Veterinary Science, 5; Meterology, 5.

SPECIAL COURSE IN AGRICULTURE.

FIRST YEAR.

1. Chemistry, Physiology, Physics, Botany.
2. Chemistry, Physiology, Physics, Botany.
3. Chemistry, Physics, Cryptogamic Botany, Zoology, (Principles and Classification,) Elements of Agriculture.

SECOND YEAR.

1. Zoology, (insects useful and injurious,) Land Drainage and Irrigation, Book-keeping and Business Forms, Elements of Agriculture, Mechanical Cultivation of Soils.
2. Botany, (History of Cultivated Plants,) Nature and Origin of Soils, Orchard and Small Fruits, Physics, (Machinery,) Chemistry, (Fertilizers,) Comparative Anatomy and Veterinary Surgery.
3. Meterology, Horticulture, Special Branches of Farming, Principles of Farm Management.

COURSES IN ENGINEERING.

FIRST YEAR.

1. Solid Geometry, 5; Business Forms, Drawing, (Lettering and Working to a Scale) 5; French, 5; General Chemistry, 5.
2. Plane and Spherical Trigonometry, 5; Projection Drawing, 5; French 5; Geology, 5.
3. Surveying, 5; Plotting and Elementary Perspective, 5; French, 5; Botany, 5.

SECOND YEAR.

1. Analytical Geometry, 5; Descriptive Geometry and Drawing, 5; French and German, 5; Logic, 3; Chemistry, 2.
2. Differential Calculus, 5; Shades, Shadows, &c., 5; French and German, 5; History, 3; Chemistry, 2.
3. Integral Calculus, 5; Higher Perspective, 5; French and German, 5; English Literature, 3; Chemistry, 2.

THIRD YEAR.

1. Analytical Mechanics, 5; Physics, 5; Descriptive Astronomy, 5; German, 5.
2. Strength of Materials, &c., 5; Physics, 5; German, 5; Political Economy, 5.
3. Theory and Construction of Thermo and Hydraulic Motors, 5; Physics, 5; German 5; Psychology, 3; Practice in Drawing, under the Professor.

FOURTH YEAR.

(A,) CIVIL ENGINEERING.

1. Railroad Surveying, Drawing and Mapping Railroad Lines, &c., 10; German, 3; Geology, 5; Moral Science, 2.
2. Theory and Construction of Bridges, Drafting and Topographical Drawing, 10; German and French, 5; Chemistry and Manufacture of Cements, Mortars, &c., 5.
3. Roads, Aqueducts, Hydraulics, &c., 10; German and French, 5; Elective Studies and Thesis.

FOURTH YEAR.

(B,) MECHANICAL ENGINEERING.

1. Applications of Force to Various Forms of Materials, 3; Theoretical and Practical Gear-cutting, 2; Pattern Making, Molding, &c., 5; German, 3; Geology, 5; Moral Science, 2.
2. Practical Mechanics and Instruction in Shop, 5; Electrometry; &c., 5; German and French, 5; Chemistry, (Cements, &c.) 5.
3. Correlation of Forces, 5; Testing of Machinery and Elective Studies; French and German, 5; Thesis.

(C,) MINING ENGINEERING.

1. Surveying in Mines, &c., 5; Metallurgy, 5; Geology, 5; German, 3; Moral Science, 2.
2. Forms and Construction of Furnaces, &c., 5; Metallurgy, 10; German and French, 5.
3. Mineralogy, 5; General Study of the Mineral Resources of the United States, as to Extent, Locality, and means of Practical Development, &c.; French and German, 5; Thesis.

(D,) ARCHITECTURE.

1. Orders of Architecture and Drawing, 10; Geology, 5; German, 3; Moral Science, 2.
2. Planning, Drafting and Writing Specifications of an Important Structure, 10; Chemistry of all Kinds of Building Materials, as Stone, Mortars, Cements, &c., 5; French and German, 5; Stair Building, &c.
3. History of Architecture; Analysis and Criticism upon some Important Building; Architectural Drawing Continued; French and German; Thesis.

COURSE IN INDUSTRIAL DESIGN.

FIRST YEAR.

1. Freehand and Geometrical Drawing, Lettering and Working to a Scale, 5; Solid Geometry, 5; French, 5; Chemistry, 5.
2. Projection Drawing, 5; Plane and Spherical Trigonometry, 5; French, 5; Geology, 5.
3. Plots, Plans, Elementary Perspective, 5; Surveying, 5; French, 5; Botany, 5.

SECOND YEAR.

1. Drawing, Descriptive Geometry, 5; Analytical Geometry, 5; French and German, 5; Elective, 5.
2. Shades and Shadows, Drawing from Solid Models, Casts, Nature, 10; French and German, 5; History, 3; Elective, 2.
3. Higher Perspective, Composition and Design in any part of Drawing, according to the proficiency of the student, 10; French and German, 5; English Literature, 3; Elective, 2.

THIRD YEAR.

Composition and Design; Special practice in any of the following subjects, (to be provided for as rapidly as practicable by the Institution;) Machine Drawing, Engineering Drawing, Architectural Drawing, Lithography, Wood Engraving, Printing, Ornamental Design, 10; German, 5; Elective, 5.

FOURTH YEAR.

Practice in teaching Drawing, and in Criticisms upon Methods of Instruction, or higher practice in any of the arts provided for in the Institution, 10. Any two studies provided for in the fourth year of any other course, 10.

COURSE IN NATURAL HISTORY.

FIRST YEAR.

1. Solid Geometry, 5; Business Forms and Drawing, Lettering and Working to a Scale, 5; General Chemistry, 5.
2. Plane and Spherical Trigonometry, 5; French, 5; Geology, 5; Chemistry, 5.
3. French, 5; Descriptive Botany, 5; Chemistry, 10.

SECOND YEAR.

1. Physiological and Structural Botany, 5; French and German, 5; Entomology, 2; Logic, 3; Chemistry, 5.
2. Systematic Botany and History of Systems, 5; French and German, 5; Practice in Botanical Laboratory, 5; History, 3; Economic Botany, 2.
3. Cryptogamic Botany and Work in Laboratory, 10; Zoology, 5; French and German, 5.

THIRD YEAR.

1. Descriptive Astronomy, 5; German, 5; Distribution of Plants, 5; Zoology, 5.
2. German, 5; Zoology, 5; Use of Microscope in Botanical Work, 5; Stratigraphy and Economic Geology, 5.
3. German, 5; Psychology, 5; Paleontology, 5; Herbarium Work, 5.

FOURTH YEAR.

1. Moral Science, 2; German, 5; Zoology, 5; Paleontology, 5; Fossil Botany, 3.
2. French and German, 5; Zoology, 5; Mineralogy, 5; Herbarium Work, 5.
3. Experiments in Fertilization of Plants, 5; Herbarium Work, 5; Zoology, 5; Relations of Entomology and Botany, 5.

COURSE IN CHEMISTRY.

FIRST YEAR.

1. Freehand and Geometrical Drawing, Lettering and working to a Scale; Solid Geometry, 5; French, 5; Chemistry, 5.
2. Plane and Spherical Trigonometry, 5; French, 5; Geology, 5; Chemistry, Lectures, Recitations and Laboratory Practice, 5.
3. French, 5; Botany, 5; Chemistry, Lectures, Laboratory Practice, Synthetical Work, 10.

SECOND YEAR.

1. French and German, 5; Logic, 3; Chemistry, Lectures and Laboratory Practice in Qualitative Analysis, 12.
2. French and German, 5; History, 3; Chemistry, Lectures and Laboratory Practice in Qualitative Analysis, 12.
3. French and German, 5; English Literature, 3; Chemistry, Qualitative Analysis, Soils, Minerals and Unknown Substances, 12.

THIRD YEAR.

1. Descriptive Astronomy, 5; German, 5; Chemistry, Lectures and Practice in Quantitative Analysis, 10.
2. Political Economy, 3; German, 5; Chemistry, Lectures and Practice in Quantitative Analysis, 12.
3. Psychology, 3; German, 5; Chemistry, Quantitative Analysis, Soils, Fertilizers, Minerals and Unknown Substances, 12.

FOURTH YEAR.

(A.) CHEMICAL TECHNOLOGY.

1. German and French, 5; Moral Philosophy, 2; Wagner's Chemical Technology, 5; Laboratory Practice, 10.
2. German and French, 5; Recent Chemical Literature, American and Foreign, 5; Laboratory Work in Explosives, 10.
3. German and French, 5; Work in Coal Tar, Coloring Matter, Practical Distillation, &c., 15; Thesis, Reviews and Examinations.

(B.) METALLURGY.

German and French through the year, as in A.

1. Complete Scheme of Blow Pipe Analysis and Mineralogy, (Crystallography,) 5.
2. Volumetric Examination of Ores, 10; Mineralogy, 5.

(C.) DIDACTIC CHEMISTRY.

German and French throughout the year, as in A.

1. Theses, Original Investigations, Practice in Hearing Recitations and in Giving Lectures.
2. As above, together with Chemical Literature as in A, 2d Term.
3. General Review and Examinations; Thesis on Methods of Chemical Construction; Practice as in 1st and 2d Terms.

COURSE IN AGRICULTURE AND HORTICULTURE.

The instruction in agriculture is given in two courses, one, a four-year, the other a two-year course. They differ, not so much in the purely agricultural studies which they contain, as in the addition, in the four-year course, of certain studies which do not belong especially to agriculture, but are connected with general culture; and also of some studies relating particularly to horticulture. The course is designed to be as complete as any provided elsewhere. Those who desire to connect general mental culture with a knowledge of agriculture or horticulture will prefer the long course. Those who may be more advanced in years and who do not wish to spend so long a time in study, will find what they desire in the short course.

In both courses it has been attempted to lay a good foundation for the superstructure of practical training in agriculture and horticulture. Through chemistry the student learns of the nature of soils, by botany of the vegetable products, from zoology of the living things, whether useful or injurious, through meterology of the atmosphere, rains, etc., from physics concerning the mechanical powers and machinery. It will be the aim in this department, as in every other, to give the student the means of applying his information by the use of practical illustrations of all principles, so far as practicable.

The following books are in the Reference Library, and are always accessible to the student: Waring's Elements of Agriculture; Loudon's Encyclopædia of Agriculture; Andrew's Agricultural Engineering; Weiderman's Beautifying Country Homes; Allen's Rural Architecture; French's Farm Draining; Comparative Anatomy and Physiology of Vertebrates, (Owen, 3 Vol.) ; Harris' Insects Injurious to Vegetation; Guide to the study of Insects, Packard; American Weeds and Useful Plants; Randall's Sheep Husbandry; Flint's Cows and Dairy Farming; Guenon's Treatise on Milch Cows; Allen's American Cattle; Dadd's Cattle Doctor; Warder's Evergreens and Hedges; Warder's American Pomology; Bonner's Method of Making Manures; Dana's Muck Manual; Frank Forrester's Fish and Fishing; Langstroth on the Honey Bee; Quinby's Mysteries of Bee Keeping; Wright's Illustrated Poultry Book; Hooper's Book of Evergreens; Bryant's Forest Tree Culturist; Fuller's

Forest Tree Culturist; Fuller's Grape Culturist; Fuller's Small Fruit Culturist; Fuller's Strawberry Culturist; Fuller's Peach Culturist; Marsh's Man and Nature. In addition to these works, the student in Agriculture will have the use of works in the library on Chemistry, Geology, Mineralogy and Botany, Physics, Mechanical and Civil Engineering, Architecture and Drawing.

COURSES IN ENGINEERING.

The instruction in Engineering is embraced in four courses, one in Civil, one in Mechanical and one in Mining Engineering, together with a course in Architecture. The complete course in either of these departments occupies four years. The studies required of the student in preparation for these special departments are so nearly identical, that it is thought unnecessary to make distinct courses for them during the first three years. After having completed the work of preparation as arranged in the scheme of these years, the student in his fourth year enters upon the particular study of his chosen branch of Engineering. These courses are intended to meet the wants of students who can remain but a short time in the institution as well as those who wish to take an extended course and to qualify themselves for responsible positions. The courses comprise the work of higher mathematics, an extended course in drawing, and such branches of natural science as properly belong to instruction in Engineering, together with the study of English, French and German. Students in Surveying and Civil Engineering will be required to become proficient in the use of all engineering instruments by practice in field surveying, leveling, running out ideal railroad lines, laying out curves, topographical and hydrographical surveying, determining amount of excavations, in plotting surveys, drafting bridges and other structures, calculating material and cost, writing specifications, etc. Lafayette with its surrounding country, its railroads, bridges and manufacturing establishments affords many convenient illustrations of the subjects taught in this course.

Students in Mechanical Engineering will be required to make

themselves familiar with the use of apparatus, and by their own experiments develop the underlying principles and physical laws which enter so largely into the mechanic's work. Especial attention will be given to the various modifications and uses of machines, modes of producing and directing motive power, and in the theory of sound. Instruction will be given in the construction and use of lathes, screw-cutting, and cutting engines; also in the alloy of metals. More advanced instruction will be given in light, and in the applications of electricity; also in the construction, adjustment and use of optical instruments, and in the use of the dividing engine. Every such student will be required to devote a reasonable amount of time to work in the University shops.

Students in Mining Engineering will, in their fourth year, pay special attention to Metallurgy and Geology.

Students in Architecture will, in their fourth year, give particular attention to its history, and to Architectural drawing.

BOOKS OF REFERENCE.

Appleton's Dictionary of Mechanics, Engine Work and Engineering; Chambers' Encyclopedia; Silliman's American Journal of Science, 108 volumes; Deschanel's Physics; Practical Hydraulics; Blake's Mining Machinery, etc.; Byrne's Elements of Practical Mechanics; Colburn's Locomotive Engineering, etc.; Craik's Practical American Millwright and Miller; Fairbarn's Application of Cast and Wrought Iron to Building Purposes; Haupt's Theory of Bridge Construction; Moseley's Mechanics; Rankin's Civil Engineering; Trautwine's Railroad Curves; Whildin's Strength of Materials; Francis' Hydraulic Experiments; Krepp on Sewage; Wood's Resistance of Materials; Shaw's Architecture; Warren's Linear Perspective; Warren's Machine Construction and Drawing; Warren's Shades and Shadows; Walter Smith's Freehand Drawing and Designing, etc., etc.

COURSE IN INDUSTRIAL DESIGN.

The course in Industrial Design is arranged for students who wish to become skilled in drafting, or who wish to master some useful art, and also for those who desire to become teachers of drawing. The course does not comprehend painting or sculpture, although it forms an excellent preparation for these branches of art. The first and second years include freehand and geometrical drawing, lettering and design, projection, elementary and higher perspective, shades and shadows, and drawing from solid models and nature. The student who passes through these branches, and at the same time masters the mathematics provided in the two years, is prepared to enter upon the practical application of his knowledge and skill in any of the following subjects:

Machine Drawing, Architectural Drawing, Lithographing, Wood Engraving, Ornamental Design or Printing.

The third year provides for practice by the students in some one of the subjects just named, which practice will be required every day, and will not interfere with the student's continuing his course of study.

The fourth year provides for normal instruction and practice for those who expect to become teachers of drawing, and for higher practice for those who expect to master some industrial pursuit.

Drawing is pursued to a greater or less extent in all the courses. Freehand drawing is given at the beginning, in order to train the eye to habits of close observation, and the hand to freedom and precision of movement. This affords a good preparation for future attainments in object drawing, sketching and designing, and for proficiency in geometrical, topographical and higher perspective drawing, when the student has mastered descriptive geometry and the mathematical investigation of shades, shadow and linear perspective.

COURSE IN NATURAL HISTORY.

The instruction in Botany will embrace all the principal branches of this science. After three terms in descriptive and systematic Botany, the student will be expected to do laboratory work, making use of the microscope in cryptogamic Botany and the study of the physiology of plants; proceeding to experiments in fertilization and to special topics. Herbarium work will be required throughout the entire course.

The instruction in Zoology will be full, to correspond with the work in the other sciences.

The University has a large and valuable collection of fossils and minerals, and an excellent Herbarium. In this collection all the geological periods are illustrated, some of them quite fully.

BOOKS OF REFERENCE.

Wood's, Gray's, Youman's, Greene's, Chapman's, text-books on Botany; Henslow's Botanical Charts; the Prodromus of De-Candolle (full); Icone's Muscorum of Sullivant; Michaux and Nuttall's American *Sylva* (5 vols.); bound volumes of American Naturalist; Lyell's Principles of Geology; Dana's Manual of Geology; Nicholson's Manual of Geology; State and National Government Geological Surveys and Explorations; Nicholson's Biology; Dana's Manual of Mineralogy; Packard's Guide to the Study of Insects; Comparative Anatomy and Physiology of Vertebrates, Owen (3 vols.); Annals of Scientific Discovery, (complete); Silliman's Journal, (108 vols.); Coral and Coral Islands, Dana; Flint's Physiology, (5 vols.); Carpenter's Physiology; How to Work with the Microscope; Chapman's Flora of the Southern States.

COURSE IN CHEMISTRY.

The Chemical course is so arranged that a student may pursue his studies for either three or four years.

In the three-year course is included a complete system of instruction in general and synthetical chemistry, and in qualitative and quantitative analysis.

In the first term of the first year, instruction is given to the whole class by a series of illustrated lectures. After this term, Chemistry is elective. The plan of instruction proposes to combine the theory and practice of Chemistry in such a way as is best calculated to develop the intellectual powers and secure accuracy of knowledge. A large part of the student's time is consumed in laboratory work, under the supervision of the Professor of Chemistry and his assistants.

In the first year the work is mostly of a synthetical kind. The student prepares and studies as many simple and compound bodies as he can, illustrating the whole range of inorganic and organic Chemistry.

In the second year the instruction is mainly in qualitative analysis, as indicated in the scheme. The blow-pipe and spectroscope will be constantly employed in connection with the wet methods of separation and detection.

In the third year the student will pursue the study of general quantitative analysis. Volumetric and gravimetric methods of estimation will both be used, and when possible will be combined. The exercises will be varied and typical, illustrating all important processes in both organic and inorganic analysis, determination of minerals, fertilizers and soils.

The studies of the fourth year are arranged with reference to Chemical Technology, Metallurgy and Didactic Chemistry.

The first course in the fourth year is intended for those who expect to pursue Chemistry as an art, by entering upon some branch of Chemical manufacture. Its scope is fully set forth in the scheme. The second course is intended for students who expect to become practical Metallurgists. Instruction will be given concerning the most approved methods of reducing metals from their ores, and in the various methods of assaying.

REFERENCE BOOKS.

Miller's Chemistry, (3 vols.); Watt's Chemical Dictionary, (5 vols.); Fresenius' Quantitative Analysis; Fresenius' Qualitative Analysis; Galloway's Qualitative Analysis; Rose's Quantitative Analysis; Cooke's Chemical Philosophy; Wagner's Chemical Technology; Plattner's Blow Pipe Analysis; Bloxam's Chemistry; Attfield's Chemistry; Fowne's Chemistry, etc., etc.

POST-GRADUATE AND SPECIAL COURSES.

The Faculty offer to young men desirous of pursuing advanced and special courses the following facilities:

1. A course in Engineering.
2. A course in Natural History.
3. A course in Chemistry.
4. A course in Metallurgy.
5. A course in Physics.

These courses are intended especially for students who have taken a degree from a literary college, and who wish to fit themselves for professional efficiency in any one of the above named departments. Students proposing to enter any of these courses will be examined with special reference to the department chosen, and be assigned to such place in the course as their examinations warrant. Students not candidates for degrees will be received for special instruction in any part of the above courses to which their proficiency would profitably admit them.

These courses will be of especial value to all students who have only a year, or even a part of a year, to devote to special study.

The Post-Graduate Course in Engineering is particularly indicated in the four different courses marked out in the fourth year of the General Course in Engineering, embracing Civil

Engineering, Mining Engineering, Mechanical Engineering and Architecture.

The Post-Graduate, or Special Course in Chemistry or in Metallurgy, is particularly indicated in the fourth year of the Chemical Course. Students wishing to pursue Natural History or Physics in special study will find in the courses already provided in these subjects the general arrangement of their work, to which courses they will be admitted as to any other special course. In all cases every effort consistent with thoroughness will be made to meet the wants of the specialist. Students may present themselves at any annual examination for a degree. Residence at the University will not be required. See subject of Degrees.

MODERN LANGUAGES.

ENGLISH.

A thorough knowledge of one's own language is deemed of the highest importance; therefore instruction in English forms a proper proportion of the work throughout all the courses of study. It is intended that this instruction shall be thorough and comprehensive, so that the students who pass out from the institution will be masters of their own language, especially in its correct and ready use. The instruction in language aims to proceed upon the principle that language is the expression of thought; and in order that such instruction may be most effective, it must be based primarily upon thought, and secondly upon proper expression, to the end that the student may learn to think, speak and write readily and correctly. The work embraces the writing of letters, business forms, specifications, simple legal papers, exercises in description and narration, and essays upon various subjects. All of these exercises are required as regular recitations, subject to the criticisms of class and teacher. The work of the advanced years is intended to enlarge upon the abilities of the student as gained in the first years, and to lead him into the study of Logic, the art of Dis-

course, Debates and Literature. The writing of criticisms and essays upon subjects connected with the student's chosen line of work, together with the writing of Theses, will form an important part of the work of the last two years.

FRENCH AND GERMAN.

Students in any of the courses except Agriculture and Industrial Design, are required to spend about five terms in the study of French and seven terms in the study of German. It is intended that these languages shall be pursued to such an extent and with such thoroughness that the student may read them readily and translate them freely. This is necessary, since the principal scientific works in French and German have no English translations, which works form an important part of the literature of science.

The time given by the student to English, French and German, and the degree of mastery thereby acquired by him, affords a good knowledge of language and literature, which must prove of great practical advantage in any pursuit.

BOOKS OF REFERENCE.

Chamber's Cycloœdia of English Literature; Taine's History of English Literature; Lectures on English Language, Marsh; English Literature and Language, Craik; Science of Language, Mueller; Language and the Study of Language, Whitney; Worcester's Unabridged Dictionary; Webster's Unabridged Dictionary; Andrews' Latin-English Lexicon; Adler's German Dictionary; Spiers and Surrenne's French Dictionary; Lippincott's Pronouncing Gazetteer of the World; Lippincott's Biographical Dictionary; Allibone's Dictionary of Authors; Porter's Human Intellect; Words and their Uses, White; Thesaurus of English words, Roget.

MEANS OF ILLUSTRATION.

1. A farm of 186½ acres. 2. Vegetable garden, small fruit garden, apple and pear orchard, college lawn and grounds. 3. Chemical Laboratory and Apparatus. 4. Physical Laboratory and Apparatus. 5. Mathematical and Engineering Apparatus. 6. Museum of Mechanical Inventions. 7. Cabinet of Geological and Mineralogical Specimens. 8. Herbarium and Cabinet of Woods. 9. Library and Reading Room.

In addition to the sum of \$5,000 already expended, the Legislature has appropriated \$20,000, including \$8,000 for the purchase of stock and improvement of the farm, to be used in supplying the institution with needed facilities of illustration.

LIBRARY.

The Library of the University is composed of books of reference, some of which are named under the notes to the different courses of study, together with a large number of reports and documents. The collection comprises many valuable books, to which additions will be made as rapidly as practicable, for which purpose the Legislature has appropriated \$2,000. The Library is open to all students.

READING ROOM.

The following scientific journals, periodicals and other papers have been placed in the reading room; such additions will be made to this number as may be found needful: The Engineering and Mining Journal; The American Chemist; The American Journal of Science; The Horticulturist; The Bee Journal; The Gardeners' Monthly; The Rural New-Yorker;

The Poultry World ; The Indianapolis Daily Sentinel; Harpers' Monthly, Weekly and Bazar ; The Cincinnati Daily Gazette; The Country Gentleman ; and The American Naturalist. The Indiana Farmer, Prairie Farmer: New York Observer; Indiana School Journal; and the Nation are furnished gratuitously by the publishers.

SOCIETIES.

There are two societies of a literary and scientific character among the students. These societies may be made very profitable to students who take part in their proceedings.

MILITARY DEPARTMENT.

Provision will be made for instruction in Military Science and tactics. It is expected that an officer of the United States Army will take charge of this department the coming year.



CONDITIONS OF ADMISSION.

Applicants must be of good moral character, and if coming from other institutions, must bring certificates of honorable dismission.

REGULAR COURSES.

To be admitted as a regular student to the First Year's class applicants must have attained the age of sixteen years and must pass a satisfactory examination in

English Grammar—including Spelling and Composition.

History of the United States.

Geography.

Elements of Natural Philosophy.

Physiology.

Arithmetic—including the metric system.

Algebra—complete.

Plane Geometry.

PREPARATORY SCHOOL.

Candidates for admission to this school must pass an examination in Orthography, English Grammar, Geography and Arithmetic.

The examinations for admission will take place on Thursday and Friday, September 16 and 17. Students expecting to pass this examination must be present Thursday at nine o'clock A. M.

ADMISSION OF YOUNG WOMEN.

The University opens all of its courses of study to young women as well as to young men. No distinctions will be made in examinations, expenses or classes. They will be furnished dormitory privileges in the boarding house, equal in comfort and convenience to the quarters furnished to young men in the dormitory proper.

COURSES OF STUDY FOR YOUNG WOMEN.

No separate courses have been provided for women. It is expected that they will pursue the courses as already arranged, subject to any reasonable modification. It is believed that the work as presented in Horticulture, Natural History and Industrial Design will prove attractive to them. From the following studies as provided for in the different courses, young women may readily select profitable work for each year:

First Year.—French, Drawing, Botany, Chemistry, Geology, Book-Keeping, Mathematics, Domestic Economy.

Second Year.—French, German, English Literature, History, Drawing, Botany, Chemistry, Horticulture, Mathematics.

Third Year.—German, Physics, Botany, Chemistry, Horticulture, Astronomy, Drawing, Lithographing, Wood Engraving, Printing, Zoology, Mathematics, Psychology.

Fourth Year.—French and German, Drawing, Practice in Art Work, Horticulture, Botany, Zoology, Moral Science.

DEGREES.

The following Degrees will be conferred :

First. The Degree of "Civil Engineer" will be conferred on the student completing the course in Civil Engineering.

Second. The Degree of "Mining Engineer" will be conferred on the student completing the course in Mining Engineering.

Third. The Degree of "Bachelor of Chemistry" will be conferred on the student completing the three-year course in Chemistry, and the Degree of "Doctor of Chemistry" on the one completing the four-year course in the same department.

Fourth. The Degree of "Bachelor of Science" will be conferred on the student completing any other course of the University studies.

Fifth. The Degree of "Doctor of Science" will be conferred on the student completing any one of the Post-Graduate Courses.

CALENDAR.

FIRST TERM—Opens Thursday, September 16, 1875; closes Wednesday, December 22. 14 weeks.

SECOND TERM—Opens Tuesday, January 4, 1876; closes Friday, March 17, 1876. 12 weeks.

THIRD TERM—Opens Tuesday, March 28, 1876; closes Friday, June 16, 1876. 12 weeks.

EXPENSES.

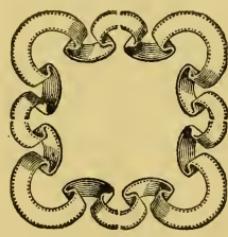
Tuition of residents of this State.....	Free.
Tuition of residents of other States, per year.....	\$20 00
Matriculation fee for full course.....	10 00
Room rent, fuel and light, per term.....	5 00
Janitor's fee and for incidentals.....	5 00
Board per week.....	3 50
Washing per dozen.....	75

Students who do not board in the institution will be charged for Janitor and incidentals. Rooms in the dormitory are furnished with bedsteads, washstands and sets and chairs. Students must furnish for themselves beds and bedding. Boarding in private families can be secured at reasonable rates. All bills except for board, must be paid strictly in advance. No student will be admitted to a class until he shows to the professor a receipt in full for all fees. Board bills must invariably be paid one-half term in advance.

Students in Chemistry will be charged \$10 per term for chemicals and use of apparatus, and also be held responsible for all breakages.

"When any student is dismissed for bad conduct he shall have none of the moneys advanced by him refunded, except for boarding, of which he shall have return of a pro rata part; but in case of a dismissal for want of ability to keep up with his class, he shall have a pro rata part of all his advance payments returned.

Students who wish to labor from two to three hours per day, with a view to paying a part of their expenses, will, when practicable, be furnished work on the farm, college grounds, or in the vegetable garden.









C
97 H
876-77

LIBRARY
OF THE
UNIVERSITY of ILLINOIS.

ANNUAL REGISTER

OF

Purdue University,

LA FAYETTE, INDIANA,

1876-77.

THE
ANNUAL REGISTER
OF
PURDUE UNIVERSITY,

LAFAYETTE, IND.

1876-77.

INDIANAPOLIS:
SENTINEL COMPANY, PRINTERS,
1877.

OFFICERS OF THE UNIVERSITY.

BOARD OF TRUSTEES.

HON. JOHN R. COFFROTH, LaFayette.
HON. JOHN SUTHERLAND, LaPorte.
GEN. MAHLON D. MANSON, Crawfordsville.
HON. JOSEPH C. RATLIFF, Richmond.
REUBEN WELLS, Esq., Jeffersonville.
R. P. HAYNES, Esq., Washington.

ADVISORY TRUSTEE.

HON. JOHN PURDUE,* LaFayette.

OFFICERS OF THE BOARD.

HON. JOHN R. COFFROTH, President.
HON. JOHN A. STEIN, Secretary.
MARTIN L. PIERCE, Esq., Treasurer.

AUDITING COMMITTEE.

E. E. WHITE.
JOHN A. STEIN.
JOHN PURDUE.*

*Died September 12, 1876.

FACULTY.

EMERSON E. WHITE, A. M., LL. D.,
President, and Professor of English Literature.

HARVEY W. WILEY, A. M., M. D.,
Professor of Chemistry and Physics.

JOHN HUSSEY, A. M., Ph. D.,
Professor of Natural History.

DAVID G. HERRON, A. M., Ph. D.,
Professor of Mathematics and Civil Engineering.

EDWARD P. MORRIS, A. B.,
Instructor in Latin and History.

WALTER L. DEAN,
Instructor in Industrial Art.

ROBERT F. H. WEYHER,
Instructor in German.

GEORGE R. CHASE, A. M.,
Principal of University Academy.

SARAH A. OREN,
Associate Principal of Academy.

WILLIAM MOHR,
Instructor on the Piano.

CAPT. L. A. BURKE,
Superintendent of the Farm.

WILLIAM HOLBURN,
Engineer and Superintendent of Buildings and Grounds.

JESSE H. BLAIR,
Librarian.

STUDENTS.

I. THE UNIVERSITY ACADEMY.

SECOND YEAR CLASS.

WILLIAM FRANKLIN BOOTHE.....	LaFayette.
CHARLES ROSCOE COLLINS.....	LaFayette.
ROBERT PARK DAVIDSON.....	LaFayette.
WALTER ELIASAPH DOOLITTLE.....	LaFayette.
HENRY MAYO GOSS.....	Peoria, Ills.
WILLIAM RICHARDSON GREGORY.....	LaFayette.
GEORGE CHARLES HANKS	LaFayette.
ELMER JOHNSON	Octagon.
GEORGE JONES LEAMING.....	LaFayette.
CURTIS ALBERT LINDSAY.....	Clarkville.
WARREN WILSON LANE.....	LaFayette.
JAMES BEVERLY MILNER.....	Sedalia.
FRANKLIN BENJAMIN NIESZ.....	Kentland.
REMUS ALVIN ROGERS.....	Newton's Retreat.
CLARENCE SEVERSON.....	LaFayette.
WILLIAM MARTIN SIMPSON.....	LaFayette.
ORTH HARPER STEIN	LaFayette.
WILLIAM EMERSON WHITE	LaFayette.
RACHEL FRANCES BEAL.....	Stockwell.
ADDIE AMELIA BORUM.....	Shawnee Mound.
EMMA LURETTA CRIST.....	LaFayette.
LENA ELLIOTT.....	New Harmony.
MARY EMMA FRASER.....	LaFayette.
SALLIE MAY GLICK.....	LaFayette.
LILLIAN HUSBAND.....	New Harmony.
IDA ALICE KIRKPATRICK	New Richmond.
JENNIE VIRGINIA SPENCER.....	LaFayette.
FLORENCE STEELY	LaFayette

FIRST YEAR CLASS.

EDWARD SAMPLE ANDERSON	Wea.
ROBERT GEORGE BAYLE	LaFayette.
FRANK BROWN	Shawnee Mound.
ASA LEWIS BURROUGHS.....	LaFayette.
JOHN EDWARD CLARK	Chauncey.

CHARLES HENRY COMSTOCK	LaFayette.
BERNHARD DANZIGER.....	LaFayette.
BLUER DeLONG.....	Marion.
LEWIS DAVID EINSEL	LaFayette.
WILLIAM IRVIN FLORENCE.....	Rensselaer.
CURTIS ELDEN HANGER	Stockwell.
DANIEL ILGENFRITZ.....	Culver Station.
HARRY ANDREW INSLEY	Chauncey.
CHARLES JONES.....	Wea.
WALTER WATSON KENDLE.....	LaFayette.
GEORGE EMERSON MARSTELLER.....	Chauncey.
CHARLES EDGAR MARTIN.....	LaFayette.
THOMAS EPHRAIM MARTIN.....	Newtown.
WASHINGTON FREMONT McCORMICK.....	LaFayette.
FRANKLIN RANDALL MERIWETHER.....	Jeffersonville.
HORACE LESLIE MOORE.....	Fairmont, Mo.
DAVID ISRAEL REYNOLDS.....	LaFayette.
FRANK ROYSE	Chauncey.
HARVEY RATLIFF.....	Marion.
FRED. WARNER SHIGLEY.....	Chauncey.
ANTONIO LEWIS MENDILLA SURFACE.....	LaFayette.
HENRY THIEME.....	LaFayette.
WILLIAM UPDEGRAFF TIMMONS	Otterbein.
WILLIAM HODGE WADDELL.....	Stockwell.
HARRISON WALLACE	Shawnee Mound.
JAMES THOMAS WESTFALL.....	Montmorency.
WILLIAM FRANKLIN WRIGHT	Marion.
WILLIAM EDWARD WHITE.....	Oxford.
NANNIE BALDRIDGE.....	Chauncey.
eva BELL BAYLE.....	LaFayette.
FLORA MAY CHIZUM	Chauncey.
KATE SHINDEL EVERNDEN.....	Chauncey.
EASTER CHRISTINA HOFFMAN.....	Clark's Hill.
MARY ELLEN HOFFMAN.....	Clark's Hill.
ROSA MARTIN.....	LaFayette.
JESSIE MARY McBROOM.....	Sugar Grove.
LIZZIE ADDIE McBROOM.....	Sugar Grove.
ELIA ANNA McCOMBS.....	Stockwell.
ADDA ELLEN McMILLIN.....	Sugar Grove.
LETTIE MARY MEHARRY.....	Shawnee Mound.
CLARA NISLEY.....	LaFayette.
ELLEN MARY O'CONNOR.....	LaFayette.
LULU BELLE PATTON.....	Chauncey.
ROSA BELL ROSSER.....	Battle Ground.
JESSIE VINCENT TALBOT	LaFayette.
ANNA TAYLOR	Taylor's Station.

II. COLLEGE OF GENERAL SCIENCE.

RESIDENT GRADUATE.

CHARLES JOHN BOHRER, B. S., LaFayette.

SENIORS.

FRANKLIN PIERCE CLARK..... Milton.

WILLIAM KING ELDREDGE..... LaFayette.

JUNIORS.

JESSE HARVEY BLAIR Indianapolis.

HATTIE MERCIE BROWN LaFayette.

FREMONT GOODWIN..... West Lebanon.

WILLIAM PERRY HAWKINS Farmers' Institute.

DANIEL WILLIAM NOBLE Indianapolis.

JOHN CROTHERS VANATTA LaFayette.

SOPHOMORES.

EULORA MILLER..... LaFayette.

*BENJAMIN FRANKLIN RAY..... LaFayette.

*EDWARD MEEKER SEAWRIGHT..... LaFayette.

GUILFORD LAWSON SPENCER LaFayette.

*JAMES ANDREW TELFORD..... LaFayette.

*EDWARD SABIN WHITE LaFayette.

FRESHMEN.

CHARLES ELDREDGE AVERY LaFayette.

JAMES NELSON BARTHOLOMEW..... Stockwell.

WILLIAM EDWARD BEACH LaFayette.

STEPHEN CLARK CULVER Culver's Station.

ARTHUR HENRY CURTIS..... LaFayette.

CHARLES MARTIN DOLL LaFayette.

SILAS JEFFERSON HOFFMAN Stockwell.

SYLVESTER HOWARD JACKSON Octagon.

MANLY AUGUSTUS JUDY..... West Lebanon.

JOHN KILBINGER..... New Harmony.

*FREDERICK ROSIER LEVERING..... LaFayette.

JAMES REED MERIWETHER..... Jeffersonville.

MABEL MILLER..... LaFayette.

MAUDE MILLER..... LaFayette.

CHASE SALMON OSBORN..... LaFayette.

LEWIS OWENS..... Chalmers.

WORTH REED..... Sugar Grove.

*Not up with the class in one study.

WILBUR FISK SEVERSON.....	LaFayette.
JAMES CLEAVENGER SHEPHERD.....	Lockland, Ohio.
FLORENCE TAYLOR.....	Taylor's Station.
HATTIE TAYLOR.....	Chauncey.
*ALBERT KING WARREN.....	Carmel.
ALFRED HENRY WINTRODE.....	Huntington.

STUDENTS IN SELECTED STUDIES.

LIDA ATKINS.....	West Point..... Eng., Lit. and Hist.
BENJ. FRANKLIN BROOKS...LaFayette	Al. and Chem.
MARTHA BUSH DICKINSON. LaFayette	Eng. Lit.
ADA WHITTRIDGE ELLSWORTH..LaFayette.....	Eng. Lit.
IDA BROWN FALLEY.....	LaFayette Eng. Lit.
CLARA GLICK.....	LaFayette Drawing.
NANNIE GROENDYKE.....	LaFayette Chem., Lat., Draw., etc.
JOEL MAPES INGERSOLL....LaFayette	Chemistry.
GEORGE ANDREW JAMISON.Chauncey	Physics.
MAY LINGLE.....	LaFayette Lat., Eng. Lit., Hist.
MABEL LINGLE.....	LaFayette Lat., Eng. Lit., Hist.
FANNIE LINGLE.....	LaFayette Drawing.
PINK MCCLURE.....	Chauncey Piano.
MERCY ELIZABETH MOORE.LaFayette	Eng. Lit.
NETTIE DEREXA MOREY.....LaFayette	Physics, Geol., Eng. Lit.
JOHN ANDERSON NIXON ...Spiceland.....	Chem., Geol., Eng. Lit.
CLARA GERTRUDE SHEPHERD...Lockland, O...	Lat., Al., Bot., etc.
ANNA COLEMAN SPENCER...LaFayette	Math., Ch., Geol., etc.
FANNY TAYLOR..... Taylor's St.....	Al , Bot., Phys., etc.
JOSEPH SIDNEY VANATTA..LaFayette	Chem., Lat. and Bot.
FREMONT WELLS..... Stockwell.....	Lat., Geom. and Phys.
JAMES WEST WRIGHT.....Burlington	Geom. and Phys.

III. SPECIAL SCHOOLS.

Students taking a special course in advance of studies included in the general course.

SCHOOL OF CHEMISTRY:

CHARLES JOHN BOHRER, B. S.....	LaFayette.
JESSE HARVEY BLAIR.....	Indianapolis.
FRANKLIN PIERCE CLARK.....	Milton, Ind.

*Not up with the class in Latin.

DANIEL WILLIAM NOBLE	Indianapolis.
JOHN CROTHERS VANATTA.....	LaFayette.

SCHOOL OF NATURAL HISTORY.

CHARLES JOHN BOHRER.....	LaFayette.
JOHN CROTHERS VANATTA.....	LaFayette

SCHOOL OF CIVIL ENGINEERING.

WILLIAM KING ELDRIDGE.....	LaFayette.
----------------------------	------------

SCHOOL OF INDUSTRIAL ART.

CLARA GLICK.....	LaFayette.
EULORA MILLER.....	LaFayette.

SUMMARY.

Academy—Second year.....	28
First year.....	51
	— 79
College—Res. Graduate.....	1
Seniors.....	2
Juniors.....	6
Sophomores.....	6
Freshmen.....	23
Elective.....	22
	— 60
Special Schools.....	10
	— 149
Deduct students twice entered.....	10
	—
Total.....	139

Students who, for sickness or other cause, were connected with the University but a few days, are not included in the above lists and summary.

Adam Wallace, LaFayette, should have been included in the Freshman class in the register for 1875-76.

COURSES OF STUDY.

Purdue University embraces three departments, designated as follows:

- I. THE UNIVERSITY ACADEMY.
- II. THE COLLEGE OF GENERAL SCIENCE.
- III. SPECIAL SCHOOLS OF SCIENCE AND TECHNOLOGY.

The aim and scope of these departments are indicated below. They are open to students of both sexes.

I. THE UNIVERSITY ACADEMY.

The Academy has the two-fold object of preparing students for admission to the College of General Science, and of providing elementary instruction in the sciences for those who can not take a more extended course.

The course for the first year provides a thorough review of the common English branches, and elementary instruction in Drawing and Physiology. The aim is to supplement the common school by imparting a more thorough knowledge of these branches than is usually given in country districts.

The instruction in Zoölogy, Botany and Physics will be chiefly oral, with the study of plants and animals, and the observation of physical phenomena. The aim is to cultivate habits of observation, and at the same time to impart a knowledge of those elementary facts and principles which have a practical relation to agriculture and the mechanic arts.

The instruction in Drawing includes drawing from blackboard, dictation, and memory, outline drawing from flat copies, original elementary design, and geometrical drawing.

The prescribed course of study is as follows:

COURSE OF STUDY IN THE ACADEMY.

First Year.

- 1st Term.....ArithmeticGeographyEnglish GrammarReading and Spelling,
2d Term.....Arithmetic.....Geography.....English GrammarReading and Spelling,
3d Term.....ArithmeticPhysiology.....English GrammarReading and Spelling.
Drawing, 2 lessons a week; Writing, 2 lessons; and Vocal Music, 1 lesson.

Second Year.

- 1st Term.....Elementary Algebra.....History of United States. .Latin, or German, or English,.....Zoölogy.
2d Term.....Elementary Algebra... { History, 6 w..... } Latin, or German, or English... { Elementary
Physical Geography..... } Physics.
3d Term.....Elementary Algebra.....Physical Geography.....Latin, or German, or English.....Botany.
Drawing, 2 lessons a week; Writing, 2 lessons; and Vocal Music, 1 lesson. Book-Keeping takes
the place of Writing the last half of the year.

Students who expect to attend the Academy but one or two terms, and those who for other good reasons may not wish to take the regular course, will be permitted to pursue selected studies, *provided they are prepared to recite in the regular classes.* Special classes can not be formed. Students preparing for the college course are not required to study Zoölogy and Botany.

The University Academy will be in charge of first-class teachers, and it will be provided with commodious rooms and other appliances necessary for thorough and practical instruction.

Conditions of Admission.—Applicants for admission to the University Academy should be at least fifteen years of age, but those of more than usual physical maturity and good health, may be admitted at the age of fourteen. Their knowledge of the common English branches must be sufficient to enable them to pass a satisfactory examination in these branches *in one year.* To this end they should be able to read and spell well; to write a legible hand; to write a letter commendably free from errors in language and the use of capitals; to name the parts of speech in simple sentences; to show a fair knowledge of Geography as presented in elementary works and also of the elements of Arithmetic, including the fundamental rules, fractions (common and decimal), denominate numbers, the first three cases of percentage, and simple interest. This elementary instruction is given in the common schools.

The Institution is not designed to be a reformatory, and hence pupils who are known to have bad habits, will not be admitted.

II. THE COLLEGE OF GENERAL SCIENCE.

The College of General Science will aim to give a thorough scientific education, first as a general preparation for all industrial pursuits and the duties of citizenship, and secondly as an adequate preparation for the Special Schools of Science and Technology.

The prescribed course of study is as follows:

GENERAL COURSE OF STUDY.

FRESHMAN YEAR. {
1st Term...Zoology Plane Geometry..... Latin or German.
2d Term...Zoology, 6 w., Physiology, 6 w. Solid Geometry..... Latin or German.
3d Term...Botany..... Solid and Inventive Geometry..... Latin or German.

Drawing two lessons a week and English Composition one lesson a week.

SOPHOMORE YEAR. {
1st Term...Botany..... Higher Algebra..... Latin or German.
2d Term...Physics Trigonometry (Plane and Spherical)..... Latin or German.
3d Term...Physics Surveying and Elements of Engineering..... Latin or German.

Ancient History one lesson a week, Drawing one lesson, and Rhetoric one lesson.

JUNIOR YEAR..... {
1st Term...Chemistry Analytical Geometry..... Latin or German.
2d Term...Chemistry Analytical Geometry 6 w., Astronomy 6 w..... Latin or German.
3d Term...Chemistry Astronomy..... Latin or German.

Mediaeval and Modern History one lesson a week, and English Literature one lesson.

SENIOR YEAR..... {
1st Term...Higher Physics..Descriptive Geometry..Political Economy..... Latin, German or French.
2d Term...Geology... Differential Calculus...Mental Philosophy..... Latin, German or French.
3d Term...Geology..... Integral Calculus..... Moral Philosophy or Logic..Latin, German or French.

English Literature one lesson a week first half of the year, and Constitution of the United States one lesson a week last half of the year.

N. B.—All the studies of the Senior Year are elective except Higher Physics and Geology; the former to be studied one term and the latter two terms. Students not devoting half of the time to a special study (see page 18), are required to pursue at least two other branches, selected from the above course.

This course is similar to the 'Scientific Course' in several other American universities and colleges, but it devotes more time to the Natural and Physical Sciences. These are the *leading* branches in the course, requiring more than one-third of the student's time for the entire period of four years. Physics and Chemistry have each one year, and Natural History and Geology, two years. The University is provided with apparatus for teaching these sciences in a thorough and practical manner.

The instruction in Zoölogy aims to give the pupil a general knowledge of the structure, habits, modes of growth, etc., of common animals, the lower animals receiving due attention. The pupil is taught how to collect objects and how to study them, and, having thus learned the leading features of a few groups, he is prepared to take a complete view of Systematic Zoölogy. Special care is taken to give the pupil some knowledge of the material classified before he is taught classification.

The instruction in Physiology is given by lectures, with illustrations. Physiological Microscopy and Histology receive special attention. Anatomy and the general principles of Hygiene receive due attention.

The instruction in Botany in the Freshman and Sophomore years includes Descriptive Botany; Physiological Botany, including the method of growth, the food, the circulatory system, and the secretions of plants; and Structural Botany, the tissues of plants being studied by means of the microscope. There is field and herbarium work throughout the course, and applications of the science to agriculture and horticulture receive special attention.

The course in Physics in the Sophomore year includes the elements of Mechanics, Hydrostatics, Pneumatics, and Acoustics, the first term; and Chemical Physics, including Heat, Light, Statical and Galvanic Electricity, the second term. The first term of the Senior year is devoted to the application of the mechanical powers to the construction of machinery, the principles of construction of reeds, organ pipes, and other resonant tubes; stringed instruments; the uses of electricity in telegraphy, electro-plating and gilding.

The course in Chemistry in the Junior year includes Theoretical and Experimental Chemistry, and the elements of Synthetical Chemistry, Analytical Chemistry (Qualitative Analysis) and Crystallography. The instruction includes lectures and recitations (5 hours a week) and laboratory practice (5 hours a week). Students use the balance and apply the principles of stoichiometry from the first. Definite quantities of substances are used and the product of each reaction weighed or measured, and the *actual* quantities thereof compared with the theoretical.

The general course of Geology (Senior year) embraces the principles of Geology, with its history and terminology, Dynamical Geology, and Paleontology.*

The general course of Mathematics includes branches taught in the best colleges, but more than the usual time is given to the branches below the Calculus, which, with Descriptive Geometry, is optional.

The student is permitted to choose one of two courses in Language, taking Latin or German. Latin or German may be continued through the Senior year, or French may be studied. Every educated person should have a knowledge of at least one language besides his own, and this fact is recognized in the course required for the degree of bachelor of science.

The instruction in the English language is made as practical and comprehensive as possible. The course in the Freshman year is chiefly devoted to English composition—to actual practice in the use of the language, orally and in writing. A student who has not acquired creditable skill in the use of his vernacular, is poorly prepared for the study of its literature.

The instruction in English literature aims to interest and direct the student in the reading of the works of one or more of the leading authors of each great epoch. It is believed that such a course is much more valuable than the memo-

*The higher courses in Zoology, Botany, Chemistry, Physics, and Geology, which may be taken in the Senior year, are described in the courses for the Special Schools, found below.

rizing of a catalogue of authors, with glances at specimens of their style. The course in the Senior year includes what may be called the philosophy of literature—its origin, development and growth.

The instruction in History is designed to be the basis of a course of historical reading, extending through three years. The weekly lesson includes a review of the student's reading, with a general summary and subordination of leading events. It is hoped that this course may not only impart some knowledge of history, but what is better, that it may create a taste for historical reading.

The instruction in Drawing in the Freshman year includes free-hand drawing from flat copies, models, and common objects; elementary and applied design; and instrumental work, including geometrical drawing and perspective. The course in the Sophomore year includes free-hand drawing from models and casts; instrumental drawing, including orthographic projection, projection of shadows, perspective, and survey platting; and applied design.

Special students, who may wish to devote most of their time to Drawing, will be permitted to enter as many of the drawing classes in the Academy and the College as may be convenient, and they will receive such special instruction as may be necessary to give completeness and system to their course. The general course in Drawing may thus be completed in one year.

The general course for the Senior year, Higher Physics and Geology excepted, is *elective*. The student who has satisfactorily completed the first three years of the course, is prepared to select intelligently a more advanced or special course of study, and to pursue it successfully. Candidates for the degree of bachelor of science (B. S.) may pursue daily, during the Senior year, three branches selected from those specified in the general course, or they may devote one-half of the time to one of the special courses in applied science or technology, and the other half to branches selected from the general course. This enables a thorough student to complete the course in any one of the Special Schools in one year after graduating from the College of General Science.

Conditions of Admission.—Applicants for admission to the

College of General Science must be over sixteen years of age and of good character, and, if coming from other institutions, they must present certificates of good standing and honorable dismission. Applicants possessing more than common physical health and strength, with high attainments in preparatory studies, may be admitted at the age of fifteen.

Applicants for admission to the Freshman class in 1877,* must pass a satisfactory examination in the common branches, and also in Elementary Algebra, the History of the United States, Physical Geography, Elementary Physics, and Physiology. Plane Geometry (two books), or Latin (one year), will be accepted as a substitute for Physical Geography or Physics, and Zoölogy or Botany will be accepted as a substitute for Physiology. The applicant's knowledge of the common branches must be sufficient to entitle him to a teacher's certificate of good grade.

Students who, for good reasons, may not desire to take the full course, will be permitted to pursue branches selected from the general course, *provided that they are prepared for their study in the regular classes.* Special classes can not be formed

Students who take an elective course, will be required to pursue enough studies to keep them fully occupied, and the selections made must be subject to the approval of the Faculty.

III. SPECIAL SCHOOLS OF SCIENCE AND TECHNOLOGY.

The University has the necessary appliances and is otherwise prepared to organize and conduct the following Special Schools:

- I. School of Agriculture and Horticulture.
- II. School of Civil Engineering and Mechanics.
- III. School of Industrial Art.
- IV. School of Chemistry and Physics.
- V. School of Natural History.

*In 1878, Latin (one year) or German (one year) will be added to the requirements for admission here given for 1877, but Plane Geometry (in full) will be accepted as a substitute for Latin or German. All of Elementary Algebra will be required.

The statements and schedules below are intended to give a general idea of the courses of instruction and study, which are or can be provided.

Students who have completed the first three years of the course in the College of General Science, will be permitted to enter any one of the Special Schools; but those who are candidates for the degree of bachelor of science, must devote one-half of the Senior year to other branches of study, selected from the general course.

The School of Agriculture and Horticulture will provide special courses for students who have completed the first two years of the general course, and the School of Industrial Art will be open to all persons who have the requisite knowledge of preparatory branches.

Graduates from other institutions, who have received the degree of bachelor of science or bachelor of arts, will be admitted to any one of the Special Schools without examination. Other students, applying for admission to the schools of Civil Engineering and Mechanics, Chemistry and Physics and Natural History, will be required to pass an examination in the prescribed preparatory branches.

Graduates will be able to complete the course in any one of the Special Schools in two years, and a part of the first year may be devoted to French or German.

I. SCHOOL OF AGRICULTURE AND HORTICULTURE.

The following course of instruction and study has been arranged.

First Year.

Chemistry, same as in Junior year of general course; Agricultural Botany, (six months); Entomology (four months); Mechanical Cultivation of the Soil; Drainage and Irrigation; Stock-breeding; Farm Buildings and Machinery; Farm Economy.

Second Year.

Analytical and Agricultural Chemistry (one year); Physiology, as related to domestic animals; Veterinary Surgery each (four months); Geology (six months); Horticulture, including the cultivation of forest trees, fruit culture, and

floriculture, with hot-house management, Landscape Gardening; Experimental Farming.

The farm, gardens, and college grounds afford illustrations of many of the subjects included in the above course, and the students taking the course will be required not only to observe, but, as far as practicable, to assist in conducting the operations under study.

Students who complete the first three years of the general course before entering upon the course in Agriculture and Horticulture, can devote one half of the first year to Senior studies, and graduate with the proper degree. The special course can subsequently be completed in one year. A diploma will be given to those who complete the course in Agriculture and Horticulture.

II. SCHOOL OF CIVIL ENGINEERING AND MECHANICS.

First Year.

Same as general course in Mathematics for the Senior year, with Analytical Mechanics.

Second Year.

1st Term.—Mechanics, as applied to Engineering—Strength of Materials; Bridges, Roofs, etc., with Mapping and Drawing; Machine and Architectural Drawing.

2d Term.—Hydraulics—Canals and Aqueducts; Drainage of Lands; Limes, Mortars, Cements, etc.

3d Term.—Railroad Engineering—Theory and Practice of Curve-tracing; Drawing and Mapping of Field-work; Topographical Surveying, etc.

The course will be made as practical as possible.

The University is supplied with machinery and other appliances requisite for a practical course of instruction in Mechanics. The students taking this course, have an opportunity to spend a part of each day in work at bench, vise, lathe, drill, planer, etc.

III. SCHOOL OF INDUSTRIAL ART.

The instruction in this school includes three courses, as follows:

I. INDUSTRIAL DESIGN.*First Year.*

Free-hand drawing from copies, models, and casts.

Instrumental drawing, including Geometric Drawing; Orthographic and Isometric Projection; Projection of Shadows and Perspective; Historical Ornament; Elementary and Applied Design.

These subjects will be carried to a more advanced stage than in the regular college course. Lectures will be given on all the subjects named above.

Students will be obliged to design articles of manufacture, as furniture, iron-work, stone-carving, carpets, porcelain, wall-paper, cloth, etc.

Second Year.

The second year will be devoted almost entirely to designing useful articles, and is intended to provide a student with the necessary information and practice to qualify him for a position as designer in a manufactory.

II. ARCHITECTURE.*First Year.*

Same as first year of course in Industrial Design, except that some time will be employed in making simple plans and elevations of building, and in drawing details of building construction.

Second Year.

1. Studies and drawings made of the five orders of architecture.
2. Drawings to scale of buildings from copy.
3. Drawings made from data given.
4. Drawings made to scale from actual measurements of structures, showing plans and elevations

Designs for buildings, giving plans, elevations, sections, perspective views; details, as doors, windows, etc., drawn on an enlarged scale.

III. MECHANICAL ENGINEERING.*First Year.*

Same as first year of course in Industrial Design, except

that some time will be employed in drawing details of machinery.

Second Year.

1. Drawing of details of machinery, as screws, gearing, etc.
2. Drawings made to scale of engines and other machines, showing plans, elevations and sections from copy.
3. Drawings from measurements made by students of machines, as a lathe, engine or other machine.

In the courses of Architecture and Engineering, orthographic projection and projection of shadows will be continued from first year, and, in addition, Descriptive Geometry, development of surfaces, and intersections of solids will be studied.

Proper lectures will be given on theory and practice.

IV. SCHOOL OF CHEMISTRY AND PHYSICS.

I. CHEMISTRY.

First Year.

Same as in Junior year of the general course.

Second Year.

1st Term.—Lectures on Qualitative Analysis, 5 hours a week; laboratory practice, 10 hours a week.

2d Term.—Lectures in Qualitative Analysis continued; soils, minerals and fertilizers; principles of Quantitative Analysis. Instruction, 5 hours a week; laboratory practice, 10 hours a week.

3d Term.—Processes of Quantitative Analysis continued; general review of principles of Analysis. Instruction, 5 hours a week; laboratory practice, 10 hours a week.

N. B. The above course in Chemistry for the second year may be taken as an elective by Senior students in the College of General Science, and, at the close of the year, they will be entitled to the degree of B. S. (See page 25.)

Third Year.

The studies of this year are arranged in three divisions, and a student, especially a graduate, should be able to

pursue successfully at least two of them. It is expected that students in the third year's course will give from six to eight hours a day to actual work in the laboratory, since it is only by constant practice that celerity and accuracy can be attained.

I. Mineralogy.—Descriptive and Mathematical Crystallography; Drawing of Crystal Forms; use of Goniometer; Determinative Mineralogy, to be taught in the Mineralogical Laboratory.

The Laboratory is provided with a reflecting goniometer and a common goniometer, a full set of crystal models in glass, with colored silk thread axes, and a set of wooden crystal models to illustrate modified forms. It is also provided with a respectable collection of minerals, suitable for illustration of physical properties and for use in chemical analysis.

II. Metallurgy and Assaying.—The course will include the assaying of lead, silver, and copper ores, the assaying of coins, plate, etc., the reduction of iron and zinc ores, and the manufacture of wrought iron and steel.

Crucible assays and cupellations will be practiced with ores of lead, silver, gold, and copper, but with coin and plate the volumetric assay will be chiefly employed. Instruction will also be given in electro-plating and the composition of alloys.

When practicable, excursions will be made to inspect furnaces in operation. Iron furnaces are accessible at Brazil and Knightsville, Bessemer steel works at Indianapolis and Chicago, and zinc furnaces at La Salle, Ill.

N. B. Students in Metallurgy and Assaying are required to take the course in Mineralogy.

III. Technical Chemistry.—The laboratory for this department is not yet equipped, but can be when there is a demand for the instruction. The course will include the manufacture of acids, and hydro-carbon products, fractional distillation of coal-tar, dye-stuffs and dyeing, soap manufacture and alkalinometry, and other technical processes.

The Chemical Laboratory has a well-selected library relating to all departments of the science. Among the journals taken are "The American Chemist," New York; "The Chemical News," London; "Journal de Pharmacie et Chemie," Paris, and "Chemisches Central-Blatt," Leipzig.

II. PHYSICS.

First Year.

Same as in the Sophomore and Senior years of the general course. This instruction is a good preparation for the special study of the subject.

Second Year.

Chief attention is given to heat, light, sound and electricity and the chief means of instruction is laboratory practice; supplemented by lectures and recitations. The physical laboratory, recently equipped and opened, is not yet complete, but it affords ample facilities for a year's work, two hours a day. The study is elective after the first term of the Senior year, but it is especially recommended that the study of the subject be continued through the Senior year.

V. SCHOOL OF NATURAL HISTORY.

The studies in Natural History are arranged under the divisions of Botany, Zoölogy and Geology, and students will be permitted to select the branch to which they wish to give special attention. The first year's course in each branch may be taken as an elective by senior students in the college, and at the close of the year they will be entitled to the degree of B. S.

I. BOTANY.

First Year.

First Term.—Structural and Physiological Botany, same as in general course, with the addition of the more recondite facts and principles, including the character and relations of parts of seeds, morphology, facts and methods of fertilization origin of tissues, relation of plants to animals, species, etc.

Second and Third Terms.—Special Botany, including the study of grasses, sedges, and higher cryptogams, and the laws of plant distribution, with original work.

Second Year.

First Term.—History of Systems of Classification.

Second Term.—Economic Botany, including the history of cultivated plants, vegetable substances used for food and medicine, and in the structural, mechanical, textile and ornamental arts.

Third Term.—Special work in Cryptogamic Botany and Vegetable Paleontology.

There will be field and herbarium work throughout the entire course. The University has a fine Herbarium and valuable works for reference and study.

II. ZOÖLOGY.*First Year.*

First and Second Terms.—Comparative Zoölogy, and History of Classification.

3d Term.—Structural relations of the Animal Kingdom.

Second Year.

Special Zoölogy.—Collections, and work in Museum.

Students in Zoölogy, in this second year's course, will usually have some specialty to which they will devote themselves. Opportunity for special study will be afforded in the collection of specimens in this department, and in the student's own field-work, which will be an important element in his progress. The University is provided with a first-class microscope and other means of histological study.

III. GEOLOGY.*First Year.*

Same as in Senior year of general course, but with more original work in field and cabinet.

Second Year.

First Term.—Economic Geology—the materials in the earth's crust useful to man, their history and methods of discovery.

Second Term.—Stratigraphy, and Stratigraphical Paleontology; methods of determining strata from their location, arrangement and composition, and the use and value of animal and vegetable remains in determining classification of strata.

Third Term.—Practical Geology, the applications of the science in public and private surveys; Special Paleontology.

There will be work in field and cabinet throughout the course.

Short Courses.—Students who, for good reasons, may not desire to take the full course in any Special School, will be permitted to take a shorter course, provided they are able to enter the regular classes.

DEGREES.

The degree of Bachelor of Science (B. S.) will be conferred on students who complete the course in the College of General Science.

The degree of Civil Engineer (C. E.) will be conferred on students who complete the course in the School of Civil Engineering.

A diploma will be granted to students who complete the course in any one of the Special Schools.

Candidates for either of the above degrees, or for a diploma, may present themselves at the annual examination before commencement. Application should be made at least three months before the examination. A residence at the University is not required.

ADVANTAGES.

Purdue University has been in operation less than three years, and it does not claim to afford advantages equal to those furnished by institutions long established and amply endowed. It is believed, however, that there are few institutions in the West which present better advantages for acquiring a general education of a scientific or industrial character, and that no one affords better advantages for the study of science and technology.

LOCATION.

The University is located about one mile west of the city of LaFayette, and less than half a mile from the village of Chauncey. The grounds are over one hundred feet above high-water mark in the Wabash River, and the buildings command a fine view of the city, valley, and surrounding country. LaFayette is situated at the intersection of four railroad lines, extending respectively from Cincinnati and Indianapolis to Chicago, from St. Louis to Toledo, from Louisville, Ky., to Michigan City, and from Bloomington, Ill., to Muncie. These roads give the University direct railroad connection with all parts of the State.

ENDOWMENT.

The endowment fund, derived from the United States land scrip, is \$300,000, in United States bonds, and the annual interest on the same is about \$20,000. For several years this will be sufficient to pay the salaries of the Faculty, and it is believed that the State will make appropriations to pay a considerable part of the current expenses, and make needed improvements. The appropriation for each of the two years is

\$6,500—for apparatus, cabinets, etc., \$2,500; for library, \$1,000; for stock, improvement of grounds, and experiments in agriculture, \$1,500; and for salaries and expenses of Trustees and Secretary, \$1,500. The present value of the lands, buildings, fixtures, etc., is over \$250,000, and, after the completion of the new college building, two annual installments, amounting to \$30,000, will be due from the estate of the late Judge Purdue. The total value of the University property is about \$600,000.

GROUNDS.

The Campus and Gardens contain twenty acres, bounded on the south and east by wide avenues. University avenue, on the east, when completed, will consist of two drives, each 25 feet wide, and three walks 12 feet wide, two outside and one between the drives. The walks are separated from the drives by rows of trees, the two outer rows being elm, and the two inner maple. In a few years this will be one of the finest avenues in the country. The campus contains nearly one mile of drives. The thirty-foot drive enters from the south end of the avenue, and, passing in front of University Hall, returns to the avenue near its centre. A twenty-foot drive leaves the main drive near University Hall and passes in front of the Dormitory, one branch passing near Military Hall and around the drill and ball grounds to the main drive, near the avenue, and the other turning to the left between the Dormitory and Military Hall, and entering the central drive which extends from the south avenue between the Laboratory and Boiler and Gas House to the north line of the campus. All of these drives are bordered on one or both sides by shade trees (pine, mountain ash, European ash, etc.) or by hedges. Convenient walks are also laid out, and the lawns are ornamented with trees, shrubs, and flowers. A "wind-break" of pines, hemlocks, and deciduous trees borders the grounds on the north and west, and several groves of choice trees relieve the landscape. Some two thousand trees and shrubs have now been planted on the grounds.

BUILDINGS.

University Hall, now in process of construction, is designed to be the main college building. It has two fronts, each 136

feet in length, and is divided by two hall-ways, each 67 feet by 14 feet 8 inches, into three sections. The central or main portion, including the halls, is 79 feet long by 67 feet wide, and the two ends are each $30\frac{1}{2}$ feet by 54 feet. The central portion is five stories high, including the basement and Mansard stories, and the two ends are each four stories high, with an attic. The three main stories are each 14 feet high in the clear, and the basement story is 10 feet. The chapel is 30 feet, including the gallery. The ends of the two hall transepts are surmounted, three by a turret and one by a tower or belfry. The basement is stone and the upper stories brick, with stone trimmings. The building contains a chapel, or assembly hall, 56 by 41 feet, with galleries on three sides; an academy hall, 56 by 41 feet; two society halls, each 51 by 29 feet; a library room, 41 by 27 feet; three cabinet rooms, each 41 by 27 feet; eight recitation rooms, each 29 by 25 feet; and four well lighted basement rooms, each 29 by 25 feet. It is expected that the building will be ready for occupancy at the opening of the next college year.

The buildings now in use are the Boarding House, the Young Men's Dormitory, the Laboratory, the Military Hall, and the Boiler and Gas House.

The Boarding House contains a spacious dining room, a kitchen, laundry, etc., and rooms for family and servants; also six suites of rooms, originally designed for members of the Faculty, and fourteen rooms, now occupied by young ladies. When the east end of the building is made a private residence, the Boarding House will accommodate about twenty young ladies and furnish two suites of rooms for members of the Faculty.

The Dormitory is four stories high. The upper three stories contain twenty-four suites of rooms, each consisting of a study room and two bed rooms with closets, and the first story contains four suites of rooms, each consisting of a study room and one bed room, and six rooms, each about the size of a study room. If each student is allowed a bed room, the Dormitory will accommodate about sixty students. The building is divided into two sections, and each section contains a bath room on each floor.

The first story of the Laboratory contains the Chemical Laboratory, with a complete set of rooms; the second story affords ample accommodations for the department of Physics; and the basement contains a large Mechanics Shop, and also rooms for assaying, smelting, etc.

The Boiler and Gas House is used for the manufacture of steam and gas for heating and lighting the entire group of buildings. It also contains the engines which are used for pumping water, and for supplying needed power for driving the machinery in the Mechanics Shop.

The Military Hall contains a spacious drill room, and smaller rooms for storing arms, drilling, etc. The drill room is also well adapted for use as a gymnasium, etc.

In the absence of a College building, the first story of the Dormitory has been used for recitation rooms, cabinet and museum rooms, library and reading rooms, etc., and rooms in the Boarding House have been used for the accommodation of the Academy. A portion of the large room in the Chemical Laboratory has been used the present year by the department of Industrial Art.

The engineer's house, gas refinery, stable, etc., located on the west side of the grounds, are north of the Laboratory. The farm house, barn, granary, and other farm buildings are located on the one hundred acres situated south of the University grounds and on the opposite side of the street.

APPARATUS, CABINETS, ETC.

The University has an ample supply of chemical apparatus and a well-equipped laboratory. Each student is furnished with a full set of apparatus and the necessary chemicals for all his work and experiments, and he is held responsible for their proper use. At the end of the year he is charged with actual breakage and damage. For illustrating the first principles of chemistry, a complete set of Hoffman's apparatus is provided. A fine lantern for projection is used to throw diagrams and formulas on the screen, thus making them plain to a large audience.

Important additions have recently been made to the apparatus in the department of Physics, the more important being

a large Gramme magneto-electric machine, and a complete phonautograph, by Koénig, of Paris. The physical apparatus is sufficient to illustrate all the more important principles in Physics, and it is especially complete in the departments of Electricity and Magnetism. Additions to the other departments will soon be made.

The Geological Cabinet contains a valuable collection of invertebrate fossils of the paleozoic ages, the Silurian and Carboniferous periods being each represented by a good working collection. There is also a collection of several hundred species of invertebrate fossils of the Tertiary age. The cabinet also contains a fair collection of minerals.

The Zoölogical Museum embraces :

1. Specimens of entomology, a few cases being mounted and named, but the greater portion being unmounted. The collection is receiving large additions.

2. A collection in recent conchology, including suites of marine, fresh-water, and land shells, to which constant additions are made.

3. The nucleus of a collection of vertebrate animals, consisting of fifty specimens of birds of this neighborhood, mounted by Mr. Charles Dury, of Cincinnati; specimens of fishes and reptiles in alcohol, sixty species; and disarticulated skeletons of the dog, cat, raccoon, muskrat, and skulls of mole, squirrel, rat, mouse, etc.

The Herbarium contains about one thousand species of mounted plants, and the collection is constantly increased by field-work and by exchanges. It is specially full in ferns, grasses, and sedges, the sets of each being nearly complete. The means of illustration in Botany also includes a set of native woods from this and adjoining counties, seeds, sections, and moist preparations; and mounted specimens for the microscope to illustrate elementary structure and cryptogamic botany.

The department of Natural History is supplied with Beck's Large Best Monocular Microscope,* with concentric

*This microscope, by the celebrated London makers, consists of the stand and the following apparatus and material: Nine object glasses, magnifying from 12 to 5,000 linear, viz., 3 in. (12°), 1½ in. (23°), ⅔ in. (32°), 4-10 in. (90°), ¼ in. (75°), 1-5 in. (100°),

rotating stage and iris diaphragm; Beck's Improved Dissecting Microscope, with two single lenses and two Coddingtons ($\frac{3}{4}$ and $\frac{1}{2}$ in. focus); a case of dissecting instruments and a collection of mounting material.

The department of Industrial Art is supplied (1) with flat copies, in outline and in light and shade, for crayon work, and colored copies of flowers; (2) with wooden models and casts for use in model drawing and chiaroscuro; (3) sets of instruments for mechanical drawing; and, (4), frames for exhibiting students' work, etc. Most of the appliances have been purchased or made the present year, and it is proposed to make additions from time to time until the department is fully equipped for art study.

The Mechanics Shop is supplied with a large metal lathe, wood lathe, drill press, grind stone, and emery wheels, all driven by steam; also a scroll saw, set of carpenter's tools, forge, anvil, etc. The Boiler and Gas House contains a steam engine, steam pump, etc.

The University farm contains one hundred and sixty nine acres of choice land, not including the college grounds and garden. It is stocked with a fine herd of blooded Short-horns and Jersey cattle, Berkshire, Essex and Poland-China hogs, fowls, etc., and it is amply supplied with improved farm implements and machinery. Its crops are equal to the best grown in this section of the State.

A wise expenditure of the five thousand dollars recently appropriated by the State, will greatly improve our appliances for illustration and study.

$\frac{5}{8}$ in. (120°), 1-10 in. immersion, (160°), 1-20 in. (140°), with Lieberkuhns to the following object-glasses: $1\frac{1}{2}$, $\frac{5}{8}$, 4-10, and $\frac{1}{4}$; seven eye-pieces, viz., one pair No. 1, one pair No. 2, one pair No. 3, one pair No. 4. Indicators to four eye-pieces; graduated draw tube; erecting glass for use with the $\frac{5}{8}$ object-glass, for erecting the image and varying the power from 5 to 150 linear; achromatic condenser, with revolving dia-phragm; right angle prism; plain diaphragm; Amici's prism; Nacher's prism; Wenham's parabolic reflector; spot-lens; polarizing apparatus; Darker's series of selenites; two double-image prisms and selenite film; large bull's-eye condensing lens; side condenser; parabolic illuminator; three dark wells and holder; opaque disk revolver; quadruple nose-piece in aluminium; Wollaston's camera lucida; eye-piece micrometer; stage micrometer; lever compressor; Wenham's compressor; parallel plate compressor; screw live-box; large live-box; small live-box; large glass trough; two glass plates with ledge and covers; set of three glass fishing tubes; Maltwood's finder; frog plate; mineral holder; stage forceps; apparatus for measuring the aperture of object-glasses; syringes for injecting animal tissues; a Valentine's knife; improved woodcutting machine; instrument for making cells of gold size; Belmontine-oil lamp, with Argand burner.

LIBRARY.

The Library comprises several hundred carefully selected volumes, including many valuable books of reference, and the Reading Room contains scientific journals, literary magazines, and daily and weekly papers. Two thousand dollars were appropriated by the late General Assembly for the purchase of books and periodicals, one thousand dollars to be expended in the fiscal year beginning November 1, 1877, and one thousand in the succeeding fiscal year. The new college building contains a commodious room for the Library, and it will soon be appropriately fitted and furnished.

SOCIETIES.

A regulation of the University forbids the organization of any society by the students, except by the consent of the Faculty. There are two literary societies—the Irving Literary Society and the Cereal Society, the former for young men, and the latter for young women. Their exercises, consisting principally of essays, declamations, debates, and orations, have been interesting and profitable. The public exercises of each society are subject, in time, place, and character, to the approval of the Faculty. The new building will furnish each society with a fine hall.

EXPENSES.

The expenses incurred in attending Purdue University are very low—less than in other institutions affording equal advantages.

The charges for the year 1877-78 will be as follows:

Entrance fee in Academy, per term, \$2 00; per year..	\$5 00
Entrance fee in College, per year.....	5 00
Matriculation fee in Special Schools.....	10 00
Incidental fee in all departments, per term, \$3.00;	
per year.....	9 00
Chemicals and gas for general course in Chemistry, per term.....	5 00
Chemicals and gas for special course in Chemistry, per term.....	10 00

Table board, per week.....	3 25
Room rent, heat and light, per week.....	50
Washing, per dozen.....	75

From the above it is seen that a student's expenses for thirty-eight weeks in the Academy or College will be as follows:

Entrance and incidental fees.....	\$14 00
Table board.....	123 50
Room, heat and light.....	19 00
Washing, about.....	12 50

Total for the year..... \$169 00

All bills, except for washing, must be paid *in advance*, entrance and incidental fees at the beginning of the term or year, and board bills at the beginning of each month, (four weeks) Bills for washing must be paid at the close of each month. A pro rata part of all fees paid in advance will be refunded to students who are withdrawn on account of sickness or for want of ability to keep up with their classes, and a pro rata part of board bills will be refunded to students who are withdrawn for any good cause. No reduction in board bills is made for a part of a day, or for absence on Saturday and Sunday.

The rooms in the Young Men's Dormitory are furnished with bedsteads, washstands and sets, and tables and chairs. Beds and bedding, towels, soap, mirror, etc., are furnished by the students.

The rooms for young ladies in the Boarding House are neatly carpeted and are furnished with beds and mattresses, washstands and sets, tables and chairs. Young ladies furnish bedding, towels, mirror, etc.

All students boarding in the Institution are required to keep their rooms in good order, and to observe other rules governing their occupancy. A failure to observe such rules or other disorderly conduct will forfeit a student's right to board in the University.

A few students will have an opportunity to work on the college ground, or in the mechanic shop, or as janitors of the several buildings, and for such work they will be paid at the

rate of ten cents an hour. By working on Saturdays and two hours a day on other week days, a student can earn nearly or quite one-third of the sum needed to meet his expenses.

Boarding in private families can be obtained in Chauncey, at reasonable rates. The distance is not too great and a good sidewalk extends from the University to the village.

STUDENTS APPOINTED BY COUNTY COMMISSIONERS.

A law passed March 12, 1877, gives the Board of Commissioners of each county of Indiana the authority to appoint two students to Purdue University, and the students thus appointed are exempt from the payment of entrance and incidental fees and the charge for room, heat, and light. The reduction, thus provided for, amounts to \$33.00 a year, or about one-fifth of all the charges made by the University. The law is given on page 36.

MUSIC.

Instruction on the Piano or Organ is charged for at the rate of \$15 for twenty-four lessons. The charge for the use of an instrument for practice, one hour a day, is 35 cents a week.

YOUNG WOMEN.

Young women are admitted to all departments of the University on the same conditions as young men. Those who board in the Institution are provided with rooms in the Boarding-House, and are under the special care of a competent lady.

APPLICATIONS.

Application for admission to any department of the University should be made to the President, and prior to the opening of a year or term, when this is practicable. In making application by letter, students are requested to give their age, the studies which they have pursued, and a general idea of their attainments. A Catalogue will be sent to any address, on application, with directions. Address, President of Purdue University, LaFayette, Indiana.

CALENDAR FOR 1877-78.

FIRST TERM.—Fifteen weeks, begins Wednesday, September 12, 1877, and ends Friday, December 21, 1877.

SECOND TERM.—Twelve weeks, begins Thursday, January 3, 1878, and ends Friday, March 24, 1878.

THIRD TERM.—Eleven weeks, begins Tuesday, April 4, 1878, and ends Thursday, June 15, 1878.

Examinations of applicants for admission to college classes of 1877-'78, June 12 and 13, and September 10 and 11, 1877.

COMMENCEMENT THURSDAY, JUNE 15, 1878.

STUDENTS' LAW.

AN ACT authorizing the appointment of students to Purdue University by the Board of Commissioners of each county, and to provide for the admittance of such scholars, and defining their privileges therein.

SECTION 1. *Be it enacted by the General Assembly of the State of Indiana,* That the Board of Commissioners of each county in this State may appoint, in such manner as they may choose, two students or scholars to Purdue University, who shall be entitled to enter, remain, and receive instruction in the same, upon the same conditions, qualifications and regulations prescribed for other applicants for admission to, or scholars in said University: *Provided, however,* That every student admitted to said University by appointment, by virtue of this act, shall in no wise be chargeable for room, light, heat, water, tuition, janitor or matriculation fees, and said students shall be entitled in the order of admittance to any room in the University, then vacant and designed for the habitation or occupancy of a student, and such student so admitted, shall have prior right to any such room, subject to the rules of the University, over any student not appointed and admitted as aforesaid.

SEC. 2. That no more than two students at the same time, from any one county, shall be entitled to admittance to said University under the provisions of this act; but the Board of Commissioners of each county may, from time to time, appoint as aforesaid to any vacancy in their appointments.

SEC. 3. Whereas, an emergency exists for the immediate taking effect of this act, the same shall be in force from and after its passage.

Approved, March 12, 1877.

J. D. WILLIAMS,
Governor.

C
P97H
1877/78

UNIVERSITY OF ILLINOIS

PRESIDENT'S OFFICE.

ANNUAL REGISTER

UNIVERSITY LIBRARY
OF
JAN

Purdue University



LA FAYETTE, INDIANA,

1877--78.

THE
ANNUAL REGISTER
OF
PURDUE UNIVERSITY,

LAFAYETTE, INDIANA,

1877-78.

INDIANAPOLIS:
INDIANAPOLIS JOURNAL COMPANY, STATE PRINTERS.
1878.

OFFICERS OF THE UNIVERSITY.

BOARD OF TRUSTEES.

GEN. MAHLON D. MANSON, Crawfordsville.
HON. JOHN SUTHERLAND, LaPorte.
HON. JOSEPH C. RATLIFF, Richmond.
REUBEN WELLS, Esq., Jeffersonville.
R. P. HAYNES, Esq., Washington.
JOHN C. DOBELBOWER, Esq., LaFayette.

OFFICERS OF THE BOARD.

GEN. MAHLON D. MANSON, President.
HON. JOHN A. STEIN, Secretary.
MARTIN L. PIERCE, Esq., Treasurer.

AUDITING COMMITTEE.

E. E. WHITE.
JOHN A. STEIN.
JOHN C. DOBELBOWER.

FACULTY.

EMERSON E. WHITE, A. M., LL. D.,
President, and Professor of English Literature.

HARVEY W. WILEY, A. M., M. D.,
Professor of Chemistry and Physics.

JOHN HUSSEY, A. M., Ph. D.,
Professor of Natural History.

DAVID G. HERRON, A. M., Ph. D.,
Professor of Mathematics and Civil Engineering.

CHARLES E. LAMBERT, A. B.,
Instructor in Latin and History.

LANGDON S. THOMPSON,
Instructor in Industrial Art.

ROBERT F. H. WEYHER,
Instructor in German.

EDWARD E. SMITH, A. M.,
Principal of the University Academy.

SARAH A. OREN,
Associate Principal of Academy.

CAPT. L. A. BURKE,
Superintendent of the Farm.

JAMES L. VAUCLAIN,
Engineer and Superintendent of Buildings.

JESSE H. BLAIR,
Librarian.

STUDENTS.

THE UNIVERSITY ACADEMY.

SECOND YEAR CLASS.

EDWIN BEARD	Newton's Retreat.
HENRY ABRAHAM BECK.....	Lebanon.
THOMAS ASBURY BRINGHAM.....	LaFayette.
JOHN PORTER BRUNTON.....	Romney.
ASA LEVI BURROUGHS.....	LaFayette.
DEWITT WALLACE CARPENTER.....	Earl Park.
BLURE DeLONG.....	Marion.
WILLIAM ELMER DRISCOLL.....	Muncie.
WILLIAM EDGAR DRISCOLL.....	Muncie.
LEVI NATHAN FOUTS	West Point.
JOHN PERRY JACKSON.....	Boonville.
JOHN DORE LA RUE.....	LaFayette.
CHARLES EDGAR MARTIN	LaFayette.
GEORGE EMERSON MARSTELLER.....	Chauncey.
VICTOR EMMANUEL RANDLES.....	Michigantown.
JACOB WARREN SLEEPER	Chauncey.
CHARLES ANDERSON SMITH.....	LaFayette.
CHARLES HENRY SUTTON.....	Montmorency.
ALBERT PETER TAYLOR.....	Boonville.
WILLIAM EDWARD WHITE.....	Oxford.
MAGGIE JANET CHAPMAN	LaFayette.
FLORA MAY CHIZUM	Chauncey.
CARRIE AVANELLE CORY.....	Chauncey.
ANNA S. HIETT	Sugar Grove.
CLARA NISLEY.....	LaFayette.
ELLA MARY O'CONNOR.....	LaFayette.
ROSA BELLE ROSSER.....	Battle Ground.
LULU BELLE PATTON	Chauncey.
JESSIE VERMILYA TALBOT.....	LaFayette.

FIRST YEAR CLASS.

BENJAMIN LINDSAY BLAIR.....	Bridgeport.
STEPHEN WHEELER BRADY	LaFayette.
ABRAHAM LINCOLN BREEDLOVE.....	Mooresville.
WILLIAM ALLEN BRINGHAM	Newton's Retreat.

KIRBY RICH BROCKENBROUGH.....	LaFayette.
ROBISON F. BULL.....	LaFayette.
HOWARD DWIGGINS	Waynetown.
JAMES REED GODMAN.....	LaFayette.
GILBERT GREENWOOD.....	Hamilton.
THOMAS PORTER HAWLEY.....	Chauncey.
GEORGE HOOPER HILL	LaFayette.
BENJAMIN FRANKLIN HOOPINGARNER.....	Butler.
RICHARD EDWARD HURDLE	LaFayette.
WASHINGTON FREMONT MCCORMICK	LaFayette.
ROBERT SAYERS McMILLIN.....	New Aurora.
CHARLES ALMUS MARSTELLER.....	Chauncey.
EDWARD MOUNT MOORE	LaFayette.
DAVID HARMON MOFFITT.....	Williamsport.
JOHN THEOPHILUS ORCHARD.....	Richmond.
SAMUEL MARTIN PETERSON.....	Potato Creek.
HARVEY RATLIFF.....	Marion.
CLINTON RAY.....	LaFayette.
JOHN READ.....	Jeffersonville.
REUBEN BAKER RESER.....	Stockwell.
FREDERICK SEVERSON.....	LaFayette.
GEORGE CANOTE SHEEKS	Mitchell.
FRED. WARNER SHIGLEY	Chauncey.
HIRAM GESEMAN SHILLING.....	Knox.
GEORGE GOGAR STOCKTON	LaFayette.
ANTONIA LINUS MENDILLA SURFACE.....	LaFayette.
EDGAR WESLEY SWADLEY.....	Independence.
WILLIAM U. TEMPLETON.....	Templeton.
WILLIS HILL WARD	Pettysville.
FANNIE ELIZA EWRY	Chauncey.
ROSA IDA FOSTER.....	Green Hill.
ANNA LAURA FOSTER.....	Green Hill.
ABBIE COOPER HAWKINS.....	Wea.*
LAURA JONES.....	Aydelotte.
LAURA ELLEN LUTZ	Wea.*
LIZZIE IRENE MARTIN	Chauncey.
JENNIE SMILEY.....	Chauncey.
MARY ELLIOTT SLEEPER.....	Chauncey.
MARY AGNES SULLINS.....	Chauncey.
ALLIE MAY SURFACE.....	LaFayette.
MELVINA MILLIE PETERSON.....	Potato Creek.

STUDENTS NOT IN REGULAR COURSE.

WILLIAM FRANKLIN BOOTHE.....	Chauncey.
FRANK DOUGHERTY BUTLER.....	Peru.
FRED LAVATER CLARK.....	Pawpaw.
STRANGE NATHANIEL CRAGUN.....	Whitestown.
WILLIAM SAWYER CRAIN	LaFayette.
ROBERT PARK DAVIDSON	LaFayette.
ALBERT FOSTER FLORENCE	Rensselaer.
WILLIAM IRVIN FLORENCE.....	Rensselaer.
WILLIAM BARNER HILL.....	Newport.
CHARLES BOWLES JAMISON.....	Chauncey.
MOSES CRAYTON MARTZ.....	Arcadia.
WILLIAM FRANCIS PEFLEY.....	Dora.
JAMES WILLIAM PAYNE	Montmorency.
WARREN ROBINSON	Rensselaer.
FRANK ROYSE.....	Chauncey.
FRANK MORGAN RANDALL.....	Fort Wayne.
FRANK ELLSWORTH SMEDLEY.....	Avon, N. Y.
GEORGE WALKER TAYLOR.....	Boonville.
CHARLES NELSON TOWLE.....	Richmond.
FRED EDWARD WEIGAND.....	Thorntown.
MAY ANGELA DAVIS	Logansport.
MATTIE GREGORY DILL.....	LaFayette.
LAURA DILL.....	LaFayette.
BETTIE JONES	Aydelotte.
ADDA BELLE McMILLIN	Sugar Grove.
ROSA MARTIN	LaFayette.
CLEMMA JANE SHEPHERD.....	Lockland, Ohio.

II. THE COLLEGE OF GENERAL SCIENCE.

RESIDENT GRADUATES.

CHARLES JOHN BOHRER, B. S.....	LaFayette.
FRANKLIN PIERCE CLARK, B. S.....	Milton.
WILLIAM KING ELDREDGE, B. S.....	LaFayette.

SENIOR CLASS.

JESSE HARVEY BLAIR.....	Indianapolis.
EULORA MILLER	LaFayette.
DANIEL WILLIAM NOBLE	Indianapolis.
JOHN COROTHERS VANATTA	LaFayette.

JUNIOR CLASS.

GUILFORD LAWSON SPENCER	LaFayette.
	_____*
NANNIE GROENENDYKE	LaFayette.
NETTIE DEREKA MOREY	LaFayette.
ANNA COLEMAN SPENCER	LaFayette.
JAMES ANDREW TELFORD.....	LaFayette.

SOPHOMORE CLASS.

WILLIAM EDWARD BEACH	LaFayette.
MABEL MILLER	LaFayette.
MAUDE MILLER	LaFayette.
LEWIS OWENS.....	Chalmers.
WORTH REED.....	Sugar Grove.
WILBUR FISK SEVERSON	LaFayette.
	_____*

CHARLES ELDREDGE AVERY	LaFayette.
JAMES NELSON BARTHOLOMEW.....	Stockwell.
ARTHUR HENRY CURTIS.....	LaFayette.
JAMES REED MERIWETHER.....	Jeffersonville.
JAMES CLEAVENGER SHEPHERD.....	Lockland, Ohio.
ALBERT KING WARREN.....	Carmel.

FRESHMAN CLASS.

CHARLES SUMNER DOWNING.....	Octagon.
EMMA LURETTA CRIST.....	LaFayette.
LENA ELLIOTT	New Harmony.
COLFAX EVERETT EARL.....	LaFayette.
MARY EMMA FRASER	LaFayette.
THOMAS CROMWELL GARD.....	Frankfort.
JOSEPH RICHEY GLADDEN.....	Stockwell.
SALLIE MAY GLICK.....	LaFayette.
ANNIE HENDERSON	LaFayette.
GEORGE CHARLES HANKS.....	LaFayette.
SYLVESTER HOWARD JACKSON.....	Brookston.
JAMES PIERCE OTIS JOHNSON.....	Octagon.
IDA ALICE KIRKPATRICK.....	Sugar Grove.
WARREN WILSON LANE.....	LaFayette.
ETHAN ALLEN MILES.....	Danville.
JAMES BEVERLY MILNER.....	Sedalia.
JOHN MARTIN MCBROOM.....	Hillsboro.

*The names below this line represent students who have not taken all of the prescribed studies. Most are regular with the exception of one branch of study.

OLIVER MORTON NISLEY	LaFayette.
JAMES OLIVER PARKER	Amo.
ANDREW EDGAR REYNOLDS.....	Sugar Grove.
WILLIAM BUCHANAN SINCLAIR.....	San Pierre.
VIRGINIA SPENCER.....	LaFayette.
WILLIAM EMERSON WHITE.....	Chauncey.
*	
WILLIAM FLETCHER COOK	Warsaw.
WILLIAM THOMAS LOEHR.....	Palestine.
GEORGE JONES LEAMING.....	LaFayette.
CLARENCE SEVERSON.....	LaFayette.
FANNIE TAYLOR	Taylor's Station,

STUDENTS PURSUING SELECTED STUDIES.

CALLIE L. BANGS	LaFayette.....	Drawing.
MARY ESTELLE EWRY.....	Chauncey	German, Zoölogy.
IDA BROWN FALLY.....	LaFayette	Drawing, Eng. Lit.
WILLIAM T. GREEN.....	Waynestown	Chemistry, Lat., Ger.
WILLIAM ROBERT KIELY	Delphi	Civil Engineering.
FREDERICK ROSIER LEVERING.....	LaFayette.....	Chem., Bot. and Phys.
MAY LINGLE	LaFayette.....	English Literature.
MABEL LINGLE	LaFayette.....	English Literature.
FANNIE LINGLE	LaFayette.....	English Literature.
HENRY M. MIDDLETON	Chauncey.....	Latin.
FANNY AMELIA MOREY	LaFayette.....	Chem., Zoöl., Phy., Ger.
ALICE PORTER	Sandusky, O	Drawing.
MARY FRANCES VAN PELT.....	Tiffin, O.....	Drawing.

III. SPECIAL SCHOOLS.

Students taking a Special Course in advance of Studies included in the General Course.

SCHOOL OF CHEMISTRY.

CHARLES JOHN BOHRER, B. S.....	LaFayette.
JESSE HARVEY BLAIR.....	Indianapolis.
FRANKLIN PIERCE CLARK, B. S.....	Milton.
GUILFORD LAWSON SPENCER.....	LaFayette.
ANNA COLEMAN SPENCER.....	LaFayette.

SCHOOL OF CIVIL ENGINEERING.

WILLIAM KING ELDREDGE, B. S	LaFayette.
WILLIAM ROBERT KIELY.....	Delphi.

SCHOOL OF INDUSTRIAL ART.

CHARLES ELDREDGE AVERY.....	LaFayette.
CALLIE L. BANGS.....	LaFayette.
MAY ANGELA DAVIS.....	Logansport.
NANNIE GROENENDYKE.....	LaFayette.
WARREN WILSON LANE	LaFayette.
FREDERICK ROSIER LEVERING.....	LaFayette.
JAMES REED MERIWETHER.....	Jeffersonville.
EULORA MILLER	LaFayette.
ALICE PORTER.....	Sandusky, O.
WORTH REED.....	Sugar Grove.
FANNY TAYLOR.....	Taylor's Station.
MARY FRANCES VAN PELT.....	Tiffin, O.

SUMMARY.

ACADEMY.

Second year.....	29
First year.....	45
Irregular.....	27
	— 101

COLLEGE.

Resident Graduates.....	3
Seniors	4
Juniors.....	5
Sophomores.....	12
Freshmen.....	28
Elective	13
	— 65

SPECIAL SCHOOLS.

Chemistry.....	5
Civil Engineering.....	2
Industrial Art.....	12
	— 19
	— 185
Students twice entered, deducted.....	19
Total.....	166

COURSES OF STUDY.

Purdue University embraces three departments, designated as follows:

- I. THE UNIVERSITY ACADEMY.
- II. THE COLLEGE OF GENERAL SCIENCE.
- III. SPECIAL SCHOOLS OF SCIENCE AND TECHNOLOGY.

The aim and scope of these departments are indicated below. They are open to students of both sexes.

I. THE UNIVERSITY ACADEMY.

The Academy has the two-fold object of preparing students for admission to the College of General Science, and of providing elementary instruction in the sciences for those who can not take a more extended course.

The course for the first year provides a thorough review of the common English branches, and elementary instruction in Drawing and Physiology. The aim is to supplement the common school by imparting a more thorough knowledge of these branches than is usually given in country districts.

The instruction in Zoölogy, Botany, and Physics will be chiefly oral, with the study of plants and animals, and the observation of physical phenomena. The aim is to cultivate habits of observation, and, at the same time, to impart a knowledge of those elementary facts and principles which have a practical relation to agriculture and the mechanic arts.

The instruction in Drawing, the first year, includes elementary exercises in free-hand outline drawing from copy,

dictation, and memory; also geometrical definitions and about forty elementary problems in geometrical drawing, with instruments. The instruction, the second year, includes free-hand drawing of ornament from copy, the elementary principles of ornament as applied to flat surfaces, and about sixty problems in geometrical drawing, with instruments.

The regular course of study is as follows:

COURSE OF STUDY IN THE ACADEMY.

FIRST YEAR.

First Term.....Arithmetic.....Geography.....English Grammar.....Reading and Spelling.
Second Term ...Arithmetic.....Geography.....English Grammar.....Reading and Spelling.
Third Term Arithmetic.....Physiology English Grammar.....Reading and Spelling.

Drawing, 2 lessons a week, and Writing, 2 lessons.

SECOND YEAR.

First Term....Elementary Algebra.....History of United States.....English.....Zoölogy.
Second Term..Elementary Algebra... { History, 6 w } English { Elementary.
Physical Geography..... } Physics.
Third Term ...Elementary Algebra.....Physical Geography.....English.....Botany.

Drawing, 2 lessons a week, and Writing, 2 lessons. Book-keeping takes the place of Writing the
last half of the year.

Students who expect to attend the Academy but one or two terms, and those who for other good reasons may not wish to take the regular course, will be permitted to pursue selected studies, *provided they are prepared to recite in the regular classes*. Special classes can not be formed. Students preparing for the college course are not required to study Zoölogy, or Botany, or Physics. German may be taken the second year, by students who are prepared to recite in the college classes.

The University Academy is in charge of first-class teachers, and it is provided with commodious rooms and other appliances necessary for thorough and practical instruction.

Conditions of Admission.—Applicants for admission to the University Academy should be at least fifteen years of age, but those of more than usual physical maturity and good health may be admitted at the age of fourteen. Their knowledge of the common English branches must be sufficient to enable them to pass a satisfactory examination in these branches *in one year*. To this end applicants should be able to read and spell well; to write a legible hand; to write a letter free from common errors in language and the use of capitals; to name the parts of speech in simple sentences; to show a fair knowledge of Geography as presented in elementary works, and also of the elements of Arithmetic, including the fundamental rules, fractions (common and decimal), denominate numbers, the first three cases of percentage, and simple interest. This elementary instruction is given in the common schools.

The Institution is not designed to be a reformatory. Applicants who are known to have bad habits will not be admitted.

II. THE COLLEGE OF GENERAL SCIENCE.

The College of General Science will aim to give a thorough scientific education, first as a general preparation for all industrial pursuits and the duties of citizenship, and secondly as an adequate preparation for the Special Schools of Science and Technology, including Agriculture and the Mechanic Arts.

The regular course of study is as follows:

GENERAL COURSE OF STUDY.

FRESHMAN YEAR. { 1st Term.....Zoology.....Plane Geometry.....Latin or German.
2d Term.....Zoology, 6 w., Physiology, 6 w., Solid Geometry.....Latin or German.
3d Term.....Botany.....Solid and Inventive Geometry.....Latin or German.

Drawing, two lessons a week; English Composition, one lesson; and Grecian and Roman History, one lesson.

SOPHOMORE YEAR. { 1st Term.....Botany.....Higher Algebra.....Latin or German.
2d Term.....Physics.....Trigonometry (Plane and Spherical).....Latin or German.
3d Term.....Physics.....Surveying and Elements of Engineering.....Latin or German.

Ancient History, one lesson a week; Drawing, two lessons; and Rhetoric, one lesson.

JUNIOR YEAR. { 1st Term.....Chemistry.....Analytical Geometry.....Latin or German.
2d Term.....Chemistry.....Analytical Geometry 6 w., Astronomy 6 w.....Latin or German.
3d Term.....Chemistry.....Astronomy.....Latin or German.

Mediaeval and Modern History, one lesson a week; and English Literature, one lesson.

SENIOR YEAR. { 1st Term.....Higher Physics, Differential Calculus.....Political Economy.....Latin, German or French.
2d Term.....Geology.....Integral Calculus.....Mental Philosophy.....Latin, German or French.
3d Term.....Geology.....Logic.....Moral Philosophy.....Latin, German or French.

English Literature, one lesson a week first half of the year; and Constitution of the United States, one lesson a week last half of the year.

N. B.—All the studies of the Senior Year are elective except Higher Physics and Geology—the former to be studied one term and the latter two terms. Students not devoting half of the time to a special study (see page 19), are required to pursue at least two other branches, selected from the above course.

This course is similar to the "Scientific Course" in several other American universities and colleges, but it devotes more time to the Natural and Physical Sciences. These are the *leading* branches in the course, requiring more than one-third of the student's time for the entire period of four years. Physics and Chemistry have each one year, and Natural History and Geology two years. The University is provided with apparatus for teaching these sciences in a thorough and practical manner.

The instruction in Zoölogy aims to give the pupil a general knowledge of the structure, habits, modes of growth, etc., of common animals—the lower animals receiving due attention. The pupil is taught how to collect objects and how to study them, and, having thus learned the leading features of a few groups, he is prepared to take a complete view of Systematic Zoölogy. Special care is taken to give the pupil some knowledge of the material classified before he is taught classification.

The instruction in Physiology is given by lectures, with illustrations. Physiological Microscopy and Histology receive special attention; also Anatomy and the general principles of Hygiene.

The instruction in Botany in the Freshman and Sophomore years includes Descriptive Botany; Physiological Botany, including the method of growth, the food, the circulatory system, and the secretions of plants; and Structural Botany, the tissues of plants being studied by means of the microscope. There is field and herbarium work throughout the course, and applications of the science to agriculture and horticulture receive special attention.

The course in Physics in the Sophomore year includes the elements of Mechanics, Hydrostatics, Pneumatics, and Acoustics, the first term; and Chemical Physics, including Heat, Light, Statical and Galvanic Electricity, the second term. The first term of the Senior year is devoted to Higher

Acoustics and Optics, and to the uses of electricity in telegraphy, electro-plating, and gilding.

The course in Chemistry in the Junior year includes Theoretical and Experimental Chemistry, and the elements of Synthetical Chemistry, Analytical Chemistry (Qualitative Analysis), and Crystallography. The instruction includes lectures and recitations (5 hours a week), and laboratory practice (5 hours a week). Students use the balance and apply the principles of stoichiometry from the first. Definite quantities of substances are used and the product of each reaction weighed or measured, and the *actual* quantities thereof compared with the theoretical.

The general course of Geology (Senior year) embraces the principles of Geology, with its history and terminology, Dynamical Geology, and Paleontology.*

The general course of Mathematics includes branches taught in the best colleges, but more than the usual time is given to the branches below the Calculus.

Every educated person should have a knowledge of at least one language besides his own, and this fact is recognized in the course required for the degree of bachelor of science. The student is permitted to choose one of two courses in Language, taking Latin or German. Latin or German may be continued through the Senior year, or French may be studied.

The course in Latin includes, in the Freshman year, the Grammar, the Reader, and Prose Composition; in the Sophomore year, three books of Cæsar, seven orations of Cicero, and Prose Composition; in the Junior year, six books of Virgil, two terms, and De Senectute, one term; in the Senior year, Livy, one term, Horace, one term, and Tacitus, one term.

The course in German includes, in the Freshman year,

*The higher courses in Zoölogy, Botany, Chemistry, Physics, and Geology, which may be taken in the Senior year, are described in the courses for the Special Schools, found below.

Ahn's Practical Course, Ahn's First Reader (Henn), and composition and conversation; in the Sophomore year, Ahn's German Grammar, Ahn's Second Reader (Henn), composition and conversation; in the Junior year, Schiller's *Wilhelm Tell* and *Mary Stuart*, Goethe's *Egmont*, composition and conversation; in the Senior year, Scientific German, Goethe's *Faust*, History of German Literature and Language (by lectures), and composition and conversation.

The instruction in the English language is made as practical and comprehensive as possible. The course in the Freshman year is chiefly devoted to English composition—to actual practice in the use of the language, orally and in writing. A student who has not acquired creditable skill in the use of his vernacular, is poorly prepared for the study of its literature.

The instruction in English Literature aims to interest and direct the student in the reading of the works of one or more of the leading authors of each great epoch. It is believed that such a course is much more valuable than the memorizing of a catalogue of authors, with glances at specimens of their style. The course in the Senior year includes what may be called the philosophy of literature—its origin, development, and growth.

The instruction in History, after the Freshman year, is designed to be the basis of a course of historical reading, extending through two years. The weekly lesson includes a review of the student's reading, with a general summary and subordination of leading events. It is hoped that this course may not only impart some knowledge of history, but, what is better, that it may create a taste for historical reading.

The instruction in Drawing in the Freshman year, first term, includes free-hand outline drawing from round geometrical models, as cylinders, cones, vases, wheels, crockery ware, and such common objects as illustrate the circle seen obliquely; also the drawing of objects in parallel and angu-

lar perspective, with instruments. The second term includes free-hand outline drawing from rectangular geometrical solids, as cubes, oblong blocks, triangular and hexagonal prisms, crosses, single and double, skeleton cubes, etc.; also the drawing of objects in oblique perspective, with instruments. The third term includes the free-hand outline drawing of the geometrical solids, above enumerated, *in groups*, and the application of these solids to the drawing of irregular objects, as chairs, tables, desks, sofas, and buildings; also the elementary principles of orthographic projection, or the drawing of the geometrical solids in plan and elevation.

The course in drawing in the Sophomore year, first term, includes the drawing of the rectangular geometrical solids and shading them with the crayon and the stump; also the continuation of orthographic projection and the development of the surfaces of the simpler solids. The course for the second term includes the drawing of the round geometrical solids shaded with the stump; also isometric and cabinet projections with instruments. The third term includes free-hand sketching from nature, and the projection of shadows with instruments.

The general course for the Senior year, Higher Physics and Geology excepted, is *elective*. The student who has satisfactorily completed the first three years of the course, is prepared to select intelligently a more advanced or special course of study, and to pursue it successfully. Candidates for the degree of bachelor of science (B. S.) may pursue daily, during the Senior year, three branches selected from those specified in the general course, or they may devote one-half of the time to one of the special courses in applied science or technology, and the other half to branches selected from the general course. This enables a thorough student to complete the course in any one of the Special Schools in *one year* after graduating from the College of General Science.

Conditions of Admission.—Applicants for admission to the

College of General Science must be over sixteen years of age and of good character. Applicants possessing more than common physical health and strength, with high attainments in preparatory studies, may be admitted at the age of fifteen.

Applicants for admission to the Freshman class must pass a satisfactory examination in the common branches, and also in Elementary Algebra (including quadratic equations), the History of the United States, Physical Geography, and Physiology. The applicant's knowledge of the common branches must be sufficient to entitle him to a teacher's certificate of good grade.

Students who, for good reasons, may not desire to take the regular course, will be permitted to pursue branches selected from the general course, *provided they are prepared to enter the regular classes.* Special classes can not be formed.

Students who take an elective course, will be required to pursue enough studies to keep them fully occupied, and the selections must be made subject to the approval of the Faculty.

III. SPECIAL SCHOOLS OF SCIENCE AND TECHNOLOGY.

The University has the necessary appliances to organize and conduct the following Special Schools:

- I. School of Agriculture and Horticulture.
- II. School of Mechanics.
- III. School of Industrial Art.
- IV. School of Civil Engineering.
- V. School of Chemistry and Physics.
- VI. School of Natural History.

The School of Agriculture and Horticulture is open to all persons who have the requisite knowledge of Botany, Zoölogy, and Physics, and other preparatory branches. The course may be taken with advantage by students who have completed the first two years of the general course.

The Schools of Mechanics and Industrial Art are open to all persons who have the requisite knowledge of preparatory branches.

The Schools of Civil Engineering, Chemistry and Physics, and Natural History, are open to students who have completed the first three years of the college course.

Senior students in the College of General Science are permitted to devote one-half of their time to the course in any one of the Special Schools. See page 19.

Graduates from other institutions, who have received the degree of bachelor of science or bachelor of arts, will be admitted to any one of the Special Schools without examination. Other students, applying for admission to the schools of Civil Engineering, Chemistry and Physics, and Natural History, will be required to pass an examination in the prescribed preparatory branches.

Graduates will be able to complete the course in any one of the Special Schools in two years, and a part of the first year may be devoted to French or German.

A diploma will be given to those who complete the prescribed course of study in any one of the Special Schools.

The statements and schedules below are intended to give a general idea of the courses of instruction and study, which are or can be provided.

I. SCHOOL OF AGRICULTURE AND HORTICULTURE.

The following course of instruction and study has been arranged :

FIRST YEAR.

Chemistry, same as in Junior year of general course; Agricultural Botany, six months; Entomology, four months; Mechanical Cultivation of the Soil; Drainage and Irrigation; Stock-breeding; Farm Buildings and Machinery; Farm Economy.

SECOND YEAR.

Analytical and Agricultural Chemistry, one year; Physiology, as related to domestic animals and Veterinary Surgery, each four months; Geology, six months; Horticulture, including the cultivation of forest trees, fruit culture, and floriculture, with hot-house management; Landscape Gardening; Experimental Farming.

The farm, gardens, and college grounds afford illustrations of many of the subjects included in the above course, and the students taking the course will be required not only to observe, but, as far as practicable, to assist in conducting the operations under study.

II. SCHOOL OF MECHANICS.

The course of instruction and practice in this school has not been fully arranged, a special instructor being needed. It is proposed to adopt the Russian method, recently introduced into several American schools of technology. The course will begin with wood-turning, wood-carving, and vise work in iron. Students taking the course will be required to spend a part of each day in work at bench, vise, lathe, etc.

III. SCHOOL OF INDUSTRIAL ART.

The instruction in this school includes three courses, as follows:

I. INDUSTRIAL DESIGN.

FIRST YEAR.

Free-hand and Instrumental Drawing, in addition to the course prescribed for the Academy and College Classes, will include drawing and shading from casts; shading with different mediums, as crayon, charcoal, sepia, neutral tint, india ink, etc.; Botanical Analysis of Plants and the Con-

ventionalization of foliage from nature for purposes of Design; Historical Ornament; Harmony and Contrast of Color.

SECOND YEAR.

The second year will be devoted almost entirely to designing articles of manufacture and their ornamentation, as furniture, iron-work, stone-carving, carpets, porcelain, wall paper, prints, oil cloth, stained glass, etc.

II. ARCHITECTURE.

FIRST YEAR.

Same as first year of course in Industrial Design, except that the instrumental drawing will include the drawing of stone and brick walls, foundations, and details of framing.

SECOND YEAR.

1. Studies and drawings of the five orders of architecture.
2. Drawings to scale of buildings from copy.
3. Drawings made from data given.
4. Drawings made to scale from actual measurements of structures.
5. Modeling and casting architectural ornaments.

Original Designs for buildings, giving plans, elevations, sections, perspective views; details, as doors, windows, etc., drawn on an enlarged scale.

III. MECHANICAL ENGINEERING.

FIRST YEAR.

Same as first year of course in Industrial Design, except that the instrumental drawing will include the drawing of the details of machinery.

SECOND YEAR.

1. Drawings made to scale of engines and other machines, showing plans, elevations, and sections from copy.
2. Drawings from measurements made by students of machines, as a lathe, engine, or other machine.
3. Drawings made from data given.
4. Original Designs for machines, giving plans, elevations, sections, etc.

In the courses of Architecture and Engineering, orthographic projection and projection of shadows will be continued from first year, and, in addition, Descriptive Geometry, development of surfaces, intersections of solids, and stereotomy will be studied.

IV. SCHOOL OF CIVIL ENGINEERING.

FIRST YEAR.

Same as general course in Mathematics for the Senior year, with Analytical Mechanics and Descriptive Geometry.

SECOND YEAR.

First Term.—Mechanics, as applied to Engineering—Strength of Materials; Bridges, Roofs, etc., with Mapping and Drawing; Machine and Architectural Drawing.

Second Term.—Hydraulics—Canals and Aqueducts; Drainage of Lands; Limes, Mortars, Cements, etc.

Third Term.—Railroad Engineering—Theory and Practice of Curve-tracing; Drawing and Mapping of Field-work; Topographical Surveying, etc.

The course will be made as practical as possible.

V. SCHOOL OF CHEMISTRY AND PHYSICS.

I. CHEMISTRY.

FIRST YEAR.

Same as in Junior year of the general college course.

SECOND YEAR.

First Term.—Lectures on Qualitative Analysis, 5 hours a week; laboratory practice, 10 hours a week.

Second Term.—Lectures in Qualitative Analysis continued; soils, minerals, and fertilizers; principles of Quantitative Analysis. Instruction, 5 hours a week; laboratory practice, 10 hours a week.

Third Term.—Processes of Quantitative Analysis continued; general review of principles of Analysis. Instruction, 5 hours a week; laboratory practice, 10 hours a week.

THIRD YEAR.

The studies of this year are arranged in three divisions, and a student, especially a graduate, should be able to pursue successfully at least two of them. It is expected that students in the third year's course will give from six to eight hours a day to actual work in the laboratory, since it is only by constant practice that celerity and accuracy can be attained.

I. *Mineralogy.*—Descriptive and Mathematical Crystallography; Drawing of Crystal Forms; use of Goniometer; Determinative Mineralogy, to be taught in the Mineralogical Laboratory.

The Laboratory is provided with reflecting and common goniometers, a full set of crystal models in glass, with colored silk thread axes, and a set of wooden crystal models to illustrate modified forms. It is also provided with a respectable collection of minerals, suitable for illustration of physical properties and for use in chemical analysis.

II. *Metallurgy and Assaying*.—The course will include the assaying of lead, silver, and copper ores, the assaying of coins, plate, etc., the reduction of iron and zinc ores, and the manufacture of wrought iron and steel.

Crucible assays and cupellations will be practiced with ores of lead, silver, gold, and copper, but with coin and plate, the volumetric assay will be chiefly employed. Instruction will also be given in electro-plating and the composition of alloys.

When practicable, excursions will be made to inspect furnaces in operation. Iron furnaces are accessible at Brazil and Knightsville, Bessemer steel works at Chicago, and zinc furnaces at La Salle, Illinois.

N. B. Students in Metallurgy and Assaying are required to take the course in Mineralogy.

III. *Technical Chemistry*.—The laboratory for this department is not yet equipped, but can be when there is a demand for the instruction. The course will include the manufacture of acids, and hydro-carbon products, fractional distillation of coal-tar, dye-stuffs and dyeing, soap manufacture and alkalimetry, and other technical processes.

The Chemical Laboratory has a well-selected library relating to all departments of the science. Among the journals taken are "The American Chemist," New York; "The Chemical News," London, and "Chemisches Central-Blatt," Leipzig.

II. PHYSICS.

FIRST YEAR.

Same as in the Sophomore and Senior years of the general course. This instruction is a good preparation for the special study of the subject.

SECOND YEAR.

Chief attention is given to heat, light, sound and electricity, and the chief means of instruction is laboratory

practice, supplemented by lectures and recitations. The physical laboratory, recently equipped and opened, is not yet complete, but it affords ample facilities for a year's work, two hours a day.

V. SCHOOL OF NATURAL HISTORY.

The studies in Natural History are arranged under the divisions of Botany, Zoölogy, and Geology, and students will be permitted to select the branch to which they wish to give special attention.

I. BOTANY.

FIRST YEAR.

First Term.—Structural and Physiological Botany, same as in general course, with the addition of the more recondite facts and principles, including the character and relations of parts of seeds, morphology, facts and methods of fertilization, origin of tissues, relation of plants to animals, species, etc.

Second and Third Terms.—Special Botany, including the study of grasses, sedges, and higher cryptogams, and the laws of plant distribution, with original work.

SECOND YEAR.

First Term.—History of Systems of Classification.

Second Term.—Economic Botany, including the history of cultivated plants, vegetable substances used for food and medicine, and in the structural, mechanical, textile and ornamental arts.

Third Term.—Special work in Cryptogamic Botany and Vegetable Paleontology.

There will be field and herbarium work throughout the entire course. The University has a fine Herbarium and valuable works for reference and study.

II. ZOOLOGY.

FIRST YEAR.

First and Second Terms.—Comparative Zoölogy, and History of Classification.

Third Term.—Structural relations of the Animal Kingdom.

SECOND YEAR.

Special Zoölogy.—Collections, and work in Museum.

Students in Zoölogy, in this second year's course, will usually have some specialty to which they will devote themselves. Opportunity for special study will be afforded in the collection of specimens in this department, and in the student's own field-work, which will be an important element in his progress. The University is provided with a first-class microscope and other means of histological study.

III. GEOLOGY.

FIRST YEAR.

Same as in Senior year of general course, but with more original work in field and cabinet.

SECOND YEAR.

First Term.—Economic Geology—the materials in the earth's crust useful to man, their history and methods of discovery.

Second Term.—Stratigraphy, and Stratigraphical Paleontology; methods of determining strata from their location, arrangement and composition, and the use and value of animal and vegetable remains in determining classification of strata.

Third Term.—Practical Geology, the applications of the science in public and private surveys; Special Paleontology.

There will be work in field and cabinet throughout the course.

SHORT COURSES.

Students who, for good reasons, may not desire to take the full course in any Special School, will be permitted to take a shorter course, provided they are able to enter the regular classes.

DEGREES.

The degree of Bachelor of Science (B. S.) will be conferred on students who complete the course in the College of General Science.

The degree of Civil Engineer (C. E.) will be conferred on students who complete the course in the School of Civil Engineering.

A diploma will be granted to students who complete the course in any one of the Special Schools.

Candidates for either of the above degrees, or for a diploma, may present themselves at the annual examination before commencement. Application should be made at least three months before the examination. A residence at the University is not required.

ADVANTAGES.

Purdue University has been in operation less than four years, and it does not claim to afford advantages equal to those furnished by institutions long established and amply endowed. It is believed, however, that there are few institutions in the West which present better advantages for acquiring a general education of a scientific or industrial character, and that no one affords better advantages for the study of science.

LOCATION.

The University is located about one mile west of the city of LaFayette, and less than half a mile from the village of Chauncey. The grounds are over one hundred feet above high-water mark in the Wabash River, and the buildings command a fine view of the city, valley, and surrounding country. LaFayette is situated at the intersection of four railroad lines, extending respectively from Cincinnati and Indianapolis to Chicago, from St. Louis to Toledo, from Louisville, Ky., to Michigan City, and from Bloomington, Ill., to Muncie. These roads give the University direct railroad connection with all parts of the State.

GROUNDS.

The Campus and Gardens contain twenty acres, bounded on the south and east by wide avenues. University avenue, on the east, when completed, will consist of two drives, each twenty-five feet wide, and three walks each twelve feet wide, two outside and one between the drives. The walks are sepa-

rated from the drives by rows of trees, the two outer rows being elm, and the two inner maple. The drives in the campus are bordered on one or both sides by shade trees (pine, mountain ash, European ash, etc.) or by hedges. Convenient walks are also laid out, and the lawns are ornamented with trees, shrubs, and flowers. A "wind-break" of pines, hemlocks, and deciduous trees borders the grounds on the north and west, and several groves of choice trees will soon relieve the landscape. Over two thousand trees and shrubs have now been planted on the grounds.

BUILDINGS.

The new college building, "University Hall," has two fronts, each 136 feet in length, and is divided by two hallways, each 67 feet by 14 feet 8 inches, into three sections. The central or main portion, including the halls, is 79 feet long by 67 feet wide, and the two ends are each $30\frac{1}{2}$ feet by 54 feet. The central portion is five stories high, including the basement and Mansard stories, and the two ends are each four stories high, with an attic. The three main stories are each 14 feet high in the clear, and the basement story is 10 feet. The chapel is 30 feet, including the gallery. The ends of the two hall transepts are surmounted, three by a turret and one by a tower or belfry. The basement is stone and the upper stories brick, with stone trimmings. The building contains a chapel, or assembly hall, 56 by 41 feet, with galleries on three sides; an academy hall, 56 by 41 feet; two society halls, each 51 by 29 feet; a library room, 41 by 27 feet; three cabinet rooms, each 41 by 27 feet; eight recitation rooms, each 29 by 25 feet; two well lighted basement rooms, each 29 by 25 feet; and two suites of lunch and toilet rooms.

The other buildings in use are the Boarding House, the Young Men's Dormitory, the Laboratory, the Military Hall, and the Boiler and Gas House.

The Boarding House contains a spacious dining room, a

kitchen, laundry, etc., and rooms for family and servants; also six suites of rooms, originally designed for members of the Faculty, and fourteen rooms for the occupancy of young ladies.

The Dormitory is four stories high. The upper three stories contain twenty-four suites of rooms, each consisting of a study room and two bed rooms with closets, and the first story contains four suites of rooms, each consisting of a study room and one bed room, and six rooms, each about the size of a study room. If each student is allowed a bed room, the Dormitory will accommodate about sixty students. The building is divided into two sections, and each section has a bath room on each floor.

The first story of the Laboratory contains the Chemical Laboratory, with a complete suite of rooms; the second story affords ample accommodations for the department of Physics; and the basement contains a large Mechanics Shop, and also rooms for assaying, smelting, etc.

The Boiler and Gas House contains four large steam boilers and two gas retorts for heating and lighting the entire group of buildings. It also contains the engines which are used for pumping water and for supplying needed power for driving the machinery in the Mechanics Shop.

The Military Hall contains a spacious drill room, and smaller rooms for storing arms, etc. The drill room is also well adapted for use as a gymnasium.

The engineer's house, gas refinery, stable, etc., are located on the west side of the grounds. The farm house, barn, granary, and other farm buildings are located on the one hundred acres situated south of the campus, and on the opposite side of the street.

APPARATUS, CABINETS, ETC.

The University has an ample supply of chemical apparatus and a well-equipped laboratory. Each student is furnished with a full set of apparatus and the necessary chemicals for all his work and experiments, and he is held responsible

for their proper use. At the end of the year he is charged with actual breakage and damage. For illustrating the first principles of chemistry, a complete set of Hoffman's apparatus is provided. A fine lantern for projection is used to throw diagrams and formulas on the screen, thus making them plain to a large audience.

The physical apparatus has been selected with more special reference to experimental lectures, and is fullest in the departments of electricity and magneto-electricity. It includes a full set of telegraphic apparatus, two frictional electric machines, batteries of Leyden jars, etc. The celebrated Gramme Machine furnishes an inexhaustible source of electricity for experimental and illuminating purposes. In the department of heat there is a Melloni's apparatus, with all its accessories, and in that of sound Koenig's Phonautograph, a sonometer, and a set of organ pipes. The additions, soon to be made, will have more reference to laboratory work.

The Geological Cabinet contains a valuable collection of invertebrate fossils of the paleozoic ages, the Silurian and Carboniferous periods being each represented by a good working collection. There is also a collection of several hundred species of invertebrate fossils of the Tertiary age. To the collection in paleontology has been added, by purchase of Professor D. A. Bassett, of Crawfordsville, a large collection of crinoids, representing most of the genera from that famous locality, and embracing many fine and unique specimens. The cabinet also contains a good working collection of minerals.

The Zoölogical Museum embraces:

1. Specimens of entomology, the most of which are mounted in suitable cases and named. This collection has been largely increased during the past year.
2. A collection in recent conchology, including suites of marine, fresh-water, and land shells. During the past year

P. U.—3

large additions have been made to the land and fresh-water shells.

3. A collection of vertebrate animals, to which large additions have been made in the past year. It now consists, in part, of about ninety specimens of birds of Indiana, mounted mostly by Mr. C. Dury of Cincinnati; articulated skeletons of man, the horse, cow, dog, deer, and lion, with disarticulated skeletons and skulls of the seal, horse, hog, cat, dog, monkey, rat, muskrat, raccoon, mink, weasel, and owl; and numerous specimens of serpents, fish, etc., in alcohol.

The Herbarium contains about one thousand species of mounted plants, and the collection is constantly increased by field work and by exchanges. It is specially full in ferns, grasses, and sedges, the sets of each being nearly complete. The means of illustration in Botany also include a set of native woods from this and adjoining counties, seeds, sections, and moist preparations; and mounted specimens for the microscope to illustrate elementary structure and cryptogamic botany.

The department of Natural History is supplied with Beck's Large Best Monocular Microscope,* with concentric rotating stage and iris diaphragm; Beck's Improved Dissecting Microscope, with two single lenses and two Coddingtons ($\frac{3}{4}$ and $\frac{1}{2}$ inch focus); a case of dissecting instruments and a collection of mounting material.

*This microscope, by the celebrated London makers, consists of the stand and the following apparatus and material: Nine object glasses, magnifying from 12 to 5,000 linear, viz., 3 in. (12°), $1\frac{1}{2}$ in. (23°), $\frac{2}{3}$ in. (32°), 4-10 in. (90°), $\frac{1}{2}$ in. (75°), 1-5 in. (100°), $\frac{1}{3}$ in. (120°), 1-10 in. immersion, (160°), 1-20 in. (140°), with Lieberkuhns to the following object-glasses: $1\frac{1}{2}$, $\frac{2}{3}$, 4-10, and $\frac{1}{2}$; seven eye-pieces, viz., one pair No. 1, one pair No. 2, one pair No. 3, one pair No. 4. Indicators to four eye-pieces; graduated draw tube; erecting glass for use with the $\frac{2}{3}$ object-glass, for erecting the image and varying the power from 5 to 150 linear; achromatic condenser, with revolving diaphragm; right angle prism; plain diaphragm; Amici's prism; Nachet's prism; Wenham's parabolic reflector; spot-lens; polarizing apparatus; Darker's series of selenites; two double-image prisms and selenite film; large bull's-eye condensing lens;

The Cabinet is indebted to Professor E. E. Smith for a box of fossils from Kentucky, to Mr. Joseph Sampson for a box of shells and fossils from New Harmony, Indiana, and to Mr. Job Nash, of Lafayette, for a box of minerals and fossils from the Western States and Territories. Contributions to the Museum or Cabinet have also been made by Hon. J. A. Stein, Dr. Ramsdell, Dr. Osborn, Dr. Pierson, and Messrs. B. Swearinger, A. C. Harvey, Charles Terry, J. L. McClure, O. Neil, Charles J. Bohrer, Joseph S. Vantatta, M. L. Pierce, Joseph Foster, and Robert Breckenridge.

The department of Industrial Art is supplied with (1) flat copies for outline drawing; (2) flat copies in light and shade for crayon work; (3) colored copies, for water-color painting; (4) flat copies for carpentry, architectural and machine drawing; (5) Charts to illustrate the Botanical Analysis of Plants for Purposes of Design; (6) Charts to illustrate Analysis of Historical Ornament; (7) Charts to illustrate Harmony and Contrast of Color; (8) a great variety of geometrical solids, vases, and casts for model drawing; (9) samples of prints and other textile fabrics, wall papers, carpets, etc., to illustrate the application of design to manufactures; (10) appliances for modeling in clay. The Library also contains a number of very valuable books of reference for the use of Art Students.

The Mechanics Shop is supplied with a large metal lathe, wood lathe, drill press, grind stone, and emery wheels, all driven by steam; also a scroll saw, set of carpenter's tools,

side condenser; parabolic illuminator; three dark wells and holder; opaque disk revolver; quadruple nose-piece in aluminium; Wollaston's camera lucida; eye-piece micrometer; stage micrometer; lever compressor; Wenham's compressor; parallel plate compressor; screw live-box; large live-box; small live-box; large glass trough; two glass plates with ledge and covers; set of three glass fishing tubes; Maltwood's finder; frog plate; mineral holder; stage forceps; apparatus for measuring the aperture of object-glasses; syringes for injecting animal tissues; a Valentine's knife; improved wood-cutting machine; instrument for making cells of gold size; Belmontine-oil lamp, with Argand burner.

forge, anvil, etc. The Boiler and Gas House contains a steam engine, steam pump, etc.

The University farm contains one hundred and sixty-nine acres of choice land, not including the college grounds and garden. It is stocked with Short-horn and Jersey cattle, Berkshire, Essex and Poland-China hogs, etc., and is amply supplied with improved farm implements and machinery. Its crops are equal to the best grown in this section of the State.

LIBRARY.

Important additions have recently been made to the Library by purchase and donations, and the Reading Room is well supplied with scientific journals, literary magazines, and daily and weekly papers. A wise expenditure of the second installment of the appropriation for books and periodicals, made by the State, will supply other needed reference books in the several departments of instruction, and considerably increase the collection of miscellaneous works. The University is indebted to M. L. Pierce, Esq., Rev. Dr. J. W. T. Boothe, Hon. M. D. White, M. C., President White, E. J. Hamilton, H. S. McRae, and others, for donations of books and documents. The Library occupies a commodious room, appropriately fitted and furnished.

SOCIETIES.

A regulation of the University forbids the organization of any society by the students, except by the consent of the Faculty. As a condition of admission to the College classes, students are required to give a written pledge that they will not join or be a member of any so-called Greek or other college secret society while they are students in the University.

There are two literary societies—the Irving Literary Society and the Philalethean Society, the former for young men,

and the latter for young women. Their exercises, consisting principally of essays, declamations, debates, and orations, have been interesting and profitable. The public exercises of each society are subject, in time, place, and character, to the approval of the Faculty. Each society has a fine hall.

EXPENSES.

The expenses incurred in attending Purdue University are very low—less than in other institutions affording equal advantages.

The charges for the year 1877–78 will be as follows:

Entrance fee in Academy, per term, \$2.00; per

year	\$5 00
Entrance fee in College, per year.....	5 00
Matriculation fee in Special Schools.....	10 00
Incidental fee in all departments, per term.....	3 00
Chemicals and gas for general course in Chemistry, per term.....	5 00
Chemicals and gas for special course in Chemistry, per term.....	10 00
Table board, per week.....	3 00
Room rent, heat, and light, per week.....	50
Washing, per dozen.....	75

From the above it is seen that a student's expenses for thirty-eight weeks in the Academy or College will be as follows:

Entrance and incidental fees	\$14 00
Table board.....	114 00
Room, heat and light.....	19 00
Washing, about.....	12 50
 Total for the year.....	 \$159 50

All bills, except for washing, must be paid *in advance*, entrance and incidental fees at the beginning of the term or year, and board bills at the beginning of each month, (four

weeks). Bills for washing must be paid at the close of each month. A pro rata part of all fees paid in advance will be refunded to students who are withdrawn on account of sickness or for want of ability to keep up with their classes, and a pro rata part of board bills will be refunded to students who are withdrawn for any good cause. No reduction in board bills is made for a part of a day, or for absence on Saturday and Sunday. The Boarding House is rented to Mr. John F. Hall, who furnishes table-board. All bills for the same are paid to him.

The rooms in the Young Men's Dormitory are furnished with bedsteads, washstands and sets, and tables and chairs. Beds and bedding, towels, soap, mirror, etc., are furnished by the students.

The rooms for young ladies in the Boarding House are neatly carpeted and are furnished with beds and mattresses, washstands and sets, tables and chairs. Young ladies furnish bedding, towels, mirror, etc.

All students boarding in the Institution are required to keep their rooms in good order, and to observe other rules governing their occupancy. A failure to observe such rules or other disorderly conduct will forfeit a student's right to board in the University. Young ladies occupying rooms in the Boarding House, are also required to observe the regulations of the University, and it is the duty of the proprietor to see that this is done.

A few students will have an opportunity to work on the college grounds, or on the farm, or as janitors of the several buildings, and for such work they will be paid at the rate of ten cents an hour. Application for work should be made in advance, and no student should come to the University depending on work, if he has not made successful application for it. The amount of work to be done by students is limited.

PRIVATE BOARDING.

Students who may not wish to board in the University, can obtain board in private families in Chauncey, at reasonable rates. Good accommodations for self-boarding and for club-boarding can also be secured in Chauncey, and the cost of board, including room, may thus be reduced to about \$2 per week. A good sidewalk extends from the University to the village.

STUDENTS APPOINTED BY COUNTY COMMISSIONERS.

A law passed March 12, 1877, gives the Board of Commissioners of each county of Indiana the authority to appoint two students to Purdue University, and the students, thus appointed, are exempt from the payment of entrance and incidental fees and the charges for room, heat, and light. The reduction, thus provided for, amounts to \$33.00 a year, or about one-fifth of all the charges made by the University. Forty-five of the students in attendance the present year, were appointed. The law is given on page 42.

MILITARY TACTICS.

Instruction in Military Tactics is provided for by the law of Congress endowing this Institution, and for nearly two years such instruction has been given. Over sixty students have been members of the military company the present year. The joining of the company is *voluntary*, but, when a student becomes a cadet, he is held to regular attendance and military discipline during the time of the drills. The greater number of the cadets this year provided themselves with cap and blouse at an expense of \$1.60 for both. It is believed that the drill is an excellent physical exercise, and that all who take it are greatly benefitted. The company is supplied with the best breech-loading rifles, with complete accoutrements. Upton's Tactics is used as a text book.

SUMMER SCHOOLS OF SCIENCE AND ART.

A Summer School of Drawing, the third conducted by Professor L. S. Thompson, will be held in the Art Rooms of the University, beginning Monday, July 8, 1878, and continuing four weeks. The course of instruction will include geometrical drawing, orthographic projection, perspective, free-hand from copy, model and object drawing in outline and shade, dictation drawing, decorative design, sketching from nature, etc.; also, lectures on methods of teaching drawing, historical ornament, conventionalization of plant-forms for purposes of design, modeling in clay, harmony of color, etc. Circulars giving full information may be obtained by addressing Professor L. S. Thompson, Purdue University, Lafayette, Indiana.

Professor Thompson will conduct a similar school in 1879, beginning Monday, July 7, and continuing four weeks; and Summer Schools of Chemistry and Natural History will be held in 1879, if the demand for such instruction justifies their organization.

APPLICATIONS.

Application for admission to any department of the University should be made to the President, and prior to the opening of a year or term, when this is practicable. In making application by letter, students are requested to give their age, the studies which they have pursued, and a general idea of their attainments. A catalogue will be sent to any address, on application, with directions. Address, President of Purdue University, Lafayette, Indiana.

CALENDAR FOR 1878-79.

FIRST TERM.

Fifteen weeks, begins Wednesday, September 11, 1878, and ends Friday, December 20, 1878.

SECOND TERM.

Twelve weeks, begins Tuesday, January 7, 1879, and ends Friday, March 28, 1879.

THIRD TERM.

Eleven weeks, begins Tuesday, April 8, 1879, and ends Thursday, June 19, 1879.

EXAMINATIONS.

Examinations of applicants for admission to the college classes of 1878-79, will be held June 11 and 12, and September 9 and 10, 1878.

COMMENCEMENT THURSDAY, JUNE 19, 1879.

STUDENTS' LAW.

AN ACT authorizing the appointment of students to Purdue University by the Board of Commissioners of each county, and to provide for the admittance of such scholars, and defining their privileges therein.

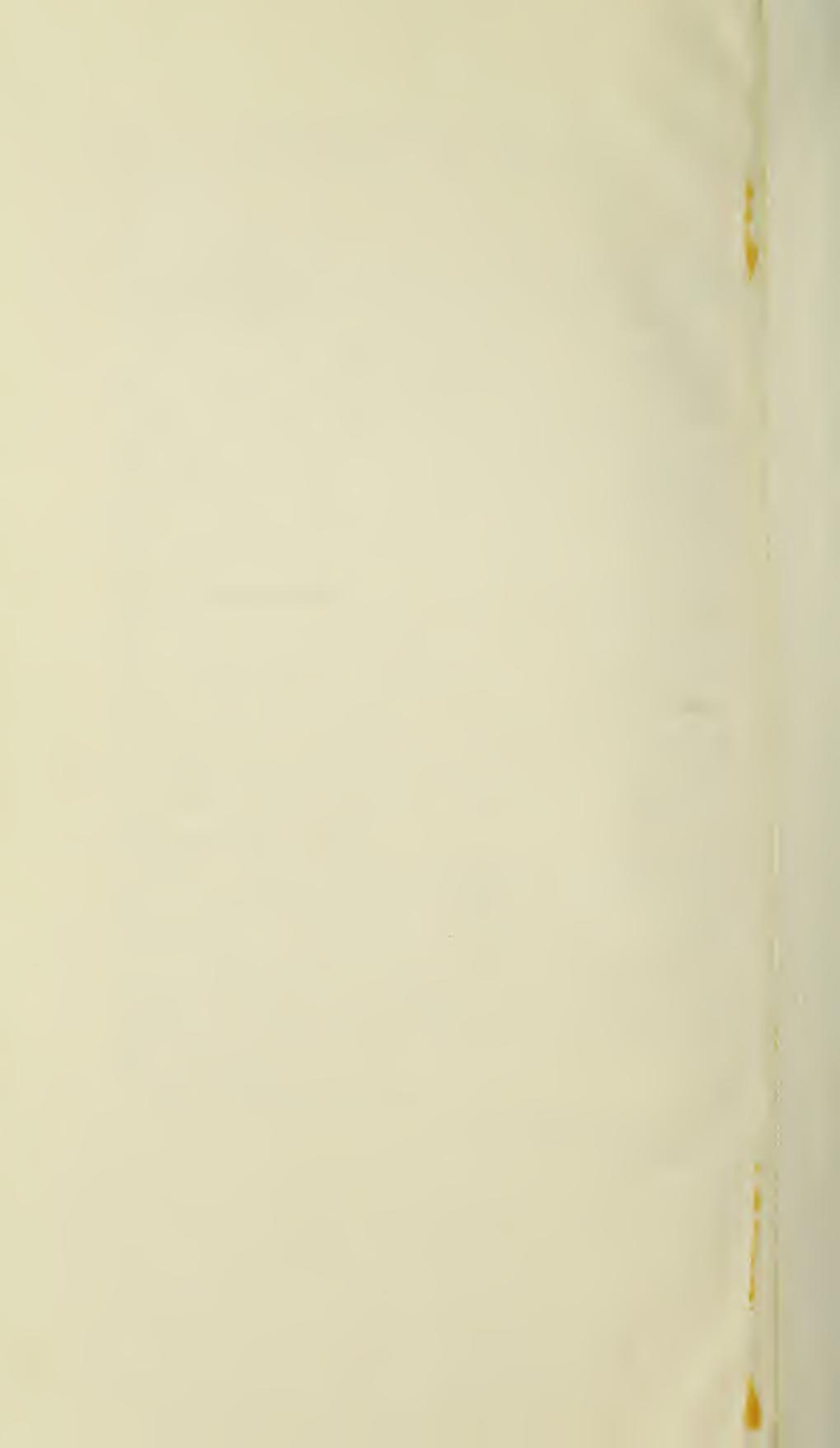
SECTION 1. *Be it enacted by the General Assembly of the State of Indiana,* That the Board of Commissioners of each county in this State may appoint, in such manner as they may choose, two students or scholars to Purdue University, who shall be entitled to enter, remain, and receive instruction in the same, upon the same conditions, qualifications and regulations prescribed for other applicants for admission to, or scholars in said University: *Provided, however,* That every student admitted to said University by appointment, by virtue of this act, shall in no wise be chargeable for room, light, heat, water, tuition, janitor or matriculation fees, and said students shall be entitled in the order of admittance to any room in the University, then vacant and designed for the habitation or occupancy of a student, and such student so admitted, shall have prior right to any such room, subject to the rules of the University, over any student not appointed and admitted as aforesaid.

SEC. 2. That no more than two students at the same time, from any one county, shall be entitled to admittance to said University under provisions of this act; but the Board of Commissioners of each county may, from time to time, appoint as aforesaid to any vacancy in their appointments.

SEC. 3. Whereas, an emergency exists for the immediate taking effect of this act, the same shall be in force from and after its passage.

Approved, March 12, 1877.

J. D. WILLIAMS,
Governor.





UNIVERSITY OF ILLINOIS-URBANA



3 0112 111431869